
STRESS, HEALTH & PERFORMANCE
in MILITARY WOMEN

✈
*Prospects, Pitfalls & Protean Patterns
from Current Research*



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DISTRIBUTION STATEMENT A
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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 1996	3. REPORT TYPE AND DATES COVERED Final	
4. TITLE AND SUBTITLE Stress, Health & Performance in Military Women. Prospects, Pitfalls & Protean Patterns from Current Research			5. FUNDING NUMBERS	
6. AUTHOR(S) Editors: Carol S. Fullerton, Ph.D. Robert J. Ursano, M.D.				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Department of Psychiatry, Uniformed Services University of the Health Sciences 4301 Jones Bridge Road Bethesda, Maryland 20814			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Commander, U.S. Army Medical Research and Materiel Command ATTENTION: MCMR-PLF (BAA-DW) Fort Detrick, Maryland 21702-5012			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Distribution Statement A			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This volume is the result of collaboration and consultation to disasters and traumatic events affecting military women and men. These empirical studies examine the psychological, behavioral, cognitive and physiological responses to traumatic events in military women across services. In this volume, the authors examine the effects of wartime deployment to the Persian Gulf, traumatic relocation of military families in the wake of Hurricane Andrew, health care and disaster workers following a mass casualty plane crash at Ramstein Air Force Base, spouses of military disaster workers following a mass-casualty plane crash on an Air Force Reserve Base in Sioux City, Iowa. The authors also conducted a large epidemiological study at two military sites (Ft. Ord, California and Ft. Carson, Colorado) to examine baseline health and develop norms for future study of gender, stress and health in soldiers exposed to military-related and generic traumatic events.				
14. SUBJECT TERMS PTSD, Post-Traumatic Stress Disorder, stress, military, health, performance, sex, trauma, gender, combat			15. NUMBER OF PAGES 473	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL	

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Includes bibliographical references.

1. Women. 2. Women's Health. 3. Stress.
4. Military. 5. Deployment. 6. War.
7. Trauma. 8. Disaster.
-
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First Edition, 1996 by Carol S. Fullerton, Ph.D. & Robert J. Ursano, M.D.
Printed in the United States of America



*To the military women and men who generously
shared their experiences as part of our research to
better understand the effects of traumatic events on
individuals and communities; it is their hope that in
sharing their experience they might be of help to others.*



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NOTICE: The studies hereinafter were conducted as part of research sponsored by the Surgeon General, USAF; funded by the Defense Women's Health Program, FY94; and administered by USAMRMC, MCMR-PLF (BAA-DW), Fort Detrick, Maryland.

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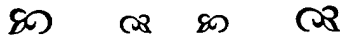
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Acknowledgments

THIS WORK IS THE RESULT of a rich collaboration among the members of the Psychiatry Department's Center for the Study of Traumatic Stress at USUHS and the colleagues who have supported our quest to better understand the impact of events that disrupt & overwhelm, yet can be sources of tremendous growth.. We come from a variety of backgrounds and represent diverse disciplines and institutions from around the world. It is through our continued collaborations that our research thrives, grows and sows the seeds for future knowledge.

We appreciate the unwavering support of Drs. James Zimble and Val Hemming. We wish to extend special thanks to Drs. Harry C. Holloway and David H. Marlowe for sharing their wisdom and creativity and for teaching us that learning comes from the interplay between our own intellectual curiosity and the curiosity of others.

Our Research Team has been a source of inspiration, providing a window through which we can observe our achievements reflected in their professional and personal growth; we thank, Alyssa Walters, Jim Leonard, Kelley Vance, Maribeth Hilliard, & Alison Vawter. We want to acknowledge, in particular, Steve Jackson, for his contributions to the work, his outstanding leadership skills, and his unique ability to gain entree into difficult groups; and Cathy Levinson for her valuable contributions to the work, her support, encouragement, and keeping us to task.





EXECUTIVE SUMMARY

From Gender Gulf to Persian Gulf

THE MILITARY HAS A STRONG INTEREST IN THE EFFECTS OF TRAUMA on individuals and groups. Historically, a great deal of what has been learned about human responses to traumatic events derives from studies of combat veterans. However, little is known about how women soldiers and officers may be uniquely affected by traumatic events and the stressors unique to the military. There is a close interplay between performance, health and psychosocial factors in responding to traumatic events. Gaining a better understanding of the gender-specific responses to traumatic events has important implications for the development of command policy, training, and medical care to meet the unique needs of women.

Systematic study of the effects of stress and trauma on women's health is timely for women in all branches of service. Over the past decade there have been a growing number of empirical studies documenting posttraumatic stress. Little is known about the specific stress responses in women in general, and in military women in particular. Military women are exposed to a unique range of stressors such as deployment and combat, exposure to severe environments, and must function in a traditionally male culture. Few studies have examined stress and health responses in military women with appropriate controls.

As greater numbers of women enter the military and with the military's mission expanding to increase its role in disaster relief efforts (e.g., Hurricane Andrew), peace keeping (e.g., Bosnia) and peace making (e.g., Haiti), the study of

gender-related responses to stress and traumatic events is critical. It is particularly relevant that the UN General Assembly Resolution 42/169, adopted on 11 December 1987, designated the 1990s as a decade for natural disaster reduction (WHO, 1992). The present volume focuses on how and in what ways gender affects response to traumatic events. This targets women as the population of study and avoids the polarization of males and females as either being extremely different or not at all different.

In the next decade, research on the health effects of women exposed to stress and traumatic events must incorporate the unique dimensions of military specific stressors along with factors specific to women in particular. Currently, we lack empirical research on the long-term effects of stress and trauma in women in the military. Interventions should offer long-term strategies that are economical and suggest directions for policy decisions.

OUR RESEARCH ON THE IMPACT OF STRESS AND TRAUMA on the health of women serving in the Armed Forces represents studies of populations involved in a wide range of occupational activities in an environment that is traditionally male dominated. Although preliminary in nature, our findings support existing research on the importance of social context, the nature of the stressors that are unique to the military and those that are often generic to women, on health and performance in high stress environments. Importantly, we designed our research and data analyses to avoid several of the common pitfalls encountered by empirical research of women, and in particular, research on military women.

Gender is not stable over groups and therefore generalization of findings must be made cautiously. For example, we all agree that there are gender-related biological differences, however these differences may have different meanings and salience depending on culture, group and individual needs. Unlike gender-related research that is narrowly focused on a particular area of interest, our research strategy is multivariant and considers the interactions of psychological, behavioral, cognitive, physiological, and social processes. This approach, advocated by Baum and Grunberg (1991), takes into account the interactions of these processes as they occur in a natural setting-not as an isolated aspect of human functioning. Although, some researchers with a narrow focus acknowledge the limitations, many proceed to draw conclusions about gender-related differences in relative isolation of other responses. Unfortunately, these studies can result in conclusions that are misleading and negatively impact on policy development.

In addition to specific topic areas for future research, indicated in the following chapters, two overall research strategies warrant consideration: the use of meta-analyses and the study of and intervention in basic training. Conducting meta-analyses of already available gender studies in relevant military areas can

Executive Summary

allow rapid application of existing findings to important issues in a cost effective manner. As always one must be careful about the generalization of findings from civilian groups. However, as a minimum this produces an advanced set of hypotheses for testing in specific military environments and with military related tasks. Targeting Basic Military Training as a research area for gender studies can address the timeliness of many gender topics and the cohort effects that they often reflect. Interventions at this time may also have effects that can generalize throughout the military and the next generation of soldiers, sailors and airmen/women...This is not to neglect the importance of senior levels of command the need to understand gender effects and intervene at this level. However, one must train the next generation to avoid the problems of the present generation.

*P*ROLOGUE

RESEARCH ON GENDER DIFFERENCES:
NEW METHODS TO THE MADNESS?

PROLOGUE

RESEARCH ON GENDER DIFFERENCES: NEW METHODS TO THE MADNESS?

*"Research on health and behavior should consider
men and women - not because it is discriminatory
not to do so - but because it is good science."*

From Baum & Grunberg (pg.84, 1991)



WE ALL WOULD AGREE that people differ. The profusion of gender-related research sustained over time and the media attention bespeaks the critical role of gender-related effects. The relationship between stress and gender-related health differences is recognized as one of the most important, yet highly controversial, ways that people differ. Gender-related differences in stress responses in the experience of traumatic events has been documented. Women in the military interact and respond in different ways than men to the military experience. The problem occurs when one group is considered the norm and the other "differs" rather than using differences to support the importance of interventions that meet the needs of various subgroups. The studies in this

compendium speak to the complex multidimensional ways in which gender mediates stress and affects health in military women.

Women in the military are affected by stressors that are **unique to the military** (e.g., war-time deployment, separation from family, working in extreme, remote and isolated environments, the potential for chemical and biological warfare (CBW); and by traumatic events which affect the general population. The nature of the specific stressors associated with a traumatic event is a combination of the stressors **unique** to the specific traumatic event, and the stressors that are **generic** to traumatic events in general (e.g., life-threat, physically demanding work, injury and illness, witnessing the death of peers, exposure to multiple and violent deaths, traumatic relocation and loss of home and community, physical injury, life-threat, bearing witness to the death of significant others).

Our project is the result of collaboration and consultation to disasters and traumatic events affecting military women and men. This compendium examines the psychological, behavioral, cognitive and physiological responses to traumatic events in military women across services. Our disaster consultations have provided the opportunity to conduct longitudinal research to examine the acute and long-term effects of stress on military women and men. In some studies we have used comparison groups of military women and men in the military who were not exposed to the traumatic event. In this volume we examine the effects of: war-time deployment to the Persian Gulf, traumatic relocation of military families in the wake of Hurricane Andrew, health care and disaster workers following a mass-casualty plane crash at Ramstein Air Force Base; spouses of military disaster workers following a mass-casualty plane crash on an Air Force Reserve Base in Sioux City, Iowa. We also conducted a large epidemiological study at two military sites (Ft. Ord, California and Ft. Carson, Colorado Springs) to examine base line health and develop norms for future study of gender, stress and health in soldiers exposed to military-related and generic traumatic events.

GROWING EVIDENCE of the IMPORTANCE of GENDER TO HEALTH

Biological processes mediate behavior directly. However, psychosocial processes also affect the body, e.g., the brain, the endocrine and immune systems. For example, researchers have speculated that exposure to uncontrollable stress precipitates changes in neurochemical systems thought to be involved in arousal, attention, learning and memory (e.g., McGaugh, 1990; Wolfe & Charney, 1991; van der Kolk, 1987; Watson, Hoffman, & Wilson, 1988). A growing body of literature has documented heightened levels of autonomic arousal in veterans with PTSD (Kolb, 1987). Arousal may be disrupted further by intrusive memories that interfere with attention (see Litz & Keane, 1989 for a review). Attentional biases and heightened physiological reactivity for trauma-

related stimuli among veterans with PTSD has been demonstrated (McNally et al, 1990; Zeitin & McNally, 1991.)

Research on the individual and group differences in response to stress and traumatic events suggests that there is no single source of resilience or vulnerability. Rather, many interacting factors come into play. First are the individual factors that are enduring, i.e., genetic predisposition's (temperament) and personality. Second are the environmental factors, e.g., psychosocial interaction including social relationships, interpersonal skills and self esteem.

Gender can mediate the effects of stress on health in several ways: biological, psychosocial and cognitive (e.g., perception, interpretation and attribution). Women are more willing to report distress than men although illness and physiologic responses may actually be similar to that of males. Women generally report greater social supports than men. Social supports (e.g. unit cohesion) affect health. There is a greater risk for posttraumatic stress in single parents with children and higher rates of somatization among women in general

THE PSYCHOLOGY OF GENDER

Implicit in research on gender is the assumption that there are meaningful differences between the sexes, and that the results of male-only studies cannot reliably be generalized to women. Gender differences are attributed to a wide range of factors: (1). biological differences (e.g., hormonal differences such as the variation in drug response by women during different stages of the menstrual cycle); (2). psychosocial differences; and (3). gender-related differences in behaviors such as smoking or substance abuse. The critical question is to what extent are gender differences clinically meaningful to health and performance.

A number of factors must be considered in order to begin to sort through the complex task of looking at gender differences. A comprehensive review of the critical issues and factors appeared in the March, 1995 issue of *American Psychologist*. Several articles present the scientific and political issues that shape the direction and success of gender studies. The lead article in this volume is a metaanalysis of the empirical literature on gender differences (Eagly, 1995). Some researchers believe that the scientific investigation of gender differences stirs controversy and should be discouraged. Other investigators stress the importance of continued empirical research on gender differences that avoids the pitfall of interperating gender differences as true of all populations, expands the variables being studied and examines the magnitude of gender differences across the dimensions of study (e.g., gender differences in social functioning vs. gender differences in cognitive functioning).

Three general dimensions account for variation in gender differences and must be considered in research to identify gender-related differences: (1). Who

Prologue

is being studied? - differences between populations (gender differences are not generic, but rather are mediated by which women and which men are being studied); (2). What is being studied? - type of functioning (e.g., social, cognitive, communication, biological etc.); (3). How much is any difference? - the magnitude of gender differences (i.g., how much difference makes a difference between the sexes); and the interaction of the type of functioning examined and the magnitude of gender differences.

Of particular relevance to the study of military women are the differences between gender as a function of group membership. It is important to determine how women in the military population differ from women in the general population on all variables. Identification of differences between women of different populations is critical to accurate generalization of findings, what factors are unique to gender differences in military women and men and what factors does the military population share with other sub-populations.

Gender and Health Behaviors

Women respond in different ways than men to health interventions. There are, however, health behaviors common to both sexes. In order implement programs designed to change high risk health behaviors, it is important to understand and identify both the gender-related behaviors and the responses common to both sexes. For example, empirical studies show the importance of gender roles in sexual behavior and the implications for interventions that target, for example, HIV risk behaviors and risk reduction among adolescents. There is, however, a paucity of literature available regarding the health education that military women receive during basic training. Although most recruits receive basic information on hygiene and first aid, instruction and information on the unique health concerns of military women is not readily available. Many of the women at high risk for pregnancies and STDs are in their late teens and early twenties and frequently are away from their families and their primary sources of support for the first time.

The higher base rates of psychiatric illness in women, their greater social supports, and higher distress after exposure to death and the grotesque, may be expected to alter responses to trauma compared to that in men. In addition, differences in fatigue, chronic stress tolerance, effects of sleep deprivation and variation of stress effects across the menstrual cycle can increase or decrease stress tolerance and health effects. Further hypothesis generating empirical study of the effects of stress on military women, coping strategies needs to focus on the operational implications of empirical studies targeted specifically at women in the military.

INTRODUCTION to the STUDIES

Carol S. Fullerton & Robert J. Ursano

INTRODUCTION to the STUDIES

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GAINING KNOWLEDGE ABOUT THE HEALTH, STRESS AND COPING responses in military women will enhance the ability to anticipate and treat adverse reactions to trauma, and thus increase readiness and performance.

The goal of our studies is to present initial analyses conducted across several populations of military women exposed to stress and trauma, and also women in a combat support unit. We recognize there are many confounders and caveats to the interpretation of these preliminary studies. They are, however, valuable in that they are empirical studies designed to examine women in the military, they use standardized instruments, they control to some extent for exposure, control groups were used in some, longitudinal data were collected (and are reported for some studies). Perhaps most important is the direction suggested by these initial findings. Taken with the limitations described below, these studies represent a unique opportunity to examine the gender-related health effects in military women across stressors (including war and disasters). These preliminary studies examined several sources of variation in women's response to stress: (1). the *within group* variation (e.g., differences among women exposed to a common stressor); (2). the *between group* variation (e.g., differences between women and men exposed to a common stressor); (3). women's responses to other types of stressors, and importantly, (4) women not exposed to these stressors. The empirical studies in this volume were designed to examine the sources of variation in women's response to stress in a model that integrates physiological, psychological, psychosocial and cognitive processes.

RISK FACTORS

A large proportion of our nation is affected by disasters (Federal Emergency Agency, 1984; Rubin & Nahavandian, 1987). Between 1965 and 1985, 31 states experienced five or more presidentially declared disasters. In the 99th and 100th Congress, over 175 Bills were introduced to deal with disaster, terrorist, and war victims. In FY 1979-80, the American Red Cross reported that more than 688,000 persons received emergency care following a disaster, and over 90,000 families were assisted. Between 1974 and 1980, there were 37 major catastrophes in the United States. Such events have a psychological and financial impact on hundreds and thousands of victims as well as their relatives and friends, witnesses, rescue workers and the military. Norris (1987) estimated that 6-7% of the United States population are exposed to a disaster or traumatic event each year -- ranging from hurricanes and tornados to motor vehicle accidents and crime. In addition, when such events involve military members and their families they also affect military readiness, the ability to deploy and the health of the fighting force.

There is agreement in the trauma literature that the validity of self-report methods is greatly improved when supplemented by clinical, behavioral and physiological measures (see Ursano et al., 1995). This dilemma is quite common in research designed to examine group and individual responses to traumatic events. For example, in order to understand risk factors following exposure to trauma and disaster, investigators examine large numbers of people exposed within an extremely short time-frame. The importance of the assessment timing is illustrated by the predictive nature of acute trauma responses to long-term outcome following trauma exposure (Fullerton & Ursano, in press). By employing measures used in current trauma research, the results of the studies described in this volume can be compared to those of other investigators. Taken with caution, the findings can identify stressors and responses that are unique to military women yet common to their civilian counterparts, common to military men, and common across different stressors. An important component is the individuals' appraisal of traumatic events and stressors, how coping is affected by appraisal and how coping is related to the maintenance of posttraumatic symptoms (Ursano & Fullerton, 1995).

RESILIENCE IN THE FACE OF TRAUMA

It should be remembered that the effects of traumatic events are not always bad. For some people, trauma and loss facilitate a move toward health. A traumatic experience can become the center around which a victim reorganizes a previously disorganized life, reorienting values and goals. Traumatic events appear to function as psychic organizers that are later expressed after symbolic, environmental, or biological stimuli. Although many survivors of the 1974 tornado in Xenia, Ohio experienced psychological distress, the majority described positive outcomes: learning that they could handle crises effectively, and feeling that they were better off for having met this type of challenge. This "benefited response" is also reported in the combat trauma literature. Sledge, Boydstun, and Rahe found that approximately 1/3 of U.S. Air Force Vietnam era prisoners of war (POWs) reported having benefited from their prisoner of war experience. These POWs tended to be the ones who had suffered the most traumatic experiences.

Resilience in the face of trauma has implications for the design of research on military women. First, define healthy recovery from trauma, i.e., a "normal response to an abnormal event" in women exposed to the unique stressors of the military. Second, examine the factors that promote healthy recovery from trauma - focus on coping and adaptive behaviors in military women. Focus on factors that can be ameliorated with training intervention, thus promoting readiness in military women.

COMBAT & COMBAT SUPPORT: NO PLACE FOR WOMEN?

In one of the earliest epidemiological studies of combat veterans, using the Epidemiological Catchment Area Study (ECA) data, Helzer (1987) found the incidence of PTSD in combat veterans to be 6.3%. In a large study of Israeli soldiers (N = 3,553) with acute combat stress reaction during the 1982 Lebanon War, Solomon and Benbenishty (1986) found chronic PTSD rates of 56% 2 years later. The National Vietnam Veterans Readjustment Study (Kulka et al. 1990, 1991; NVVRS) is the most extensive epidemiological study to date of the long-term psychiatric effects of combat. The prevalence of PTSD in Vietnam veterans up to 19 years post-war was 15% (Kulka et al. 1990). In the present day, preliminary studies of Persian Gulf war veterans during the first year after return indicated that approximately 9% of veterans had PTSD (Rosenheck et al. 1992).

The incidence of psychiatric disorders after combat is positively associated with the degree of war trauma experienced, witnessing/participation in atrocities, and with being wounded (Kulka et al. 1990; 1991; Sutker et al. 1991; Ursano et al. 1981). In addition to combat severity, other factors contribute to the risk of psychiatric disorder following combat. The NVVRS study, as well as most other

studies of clinical populations of PTSD, found high comorbid rates of Depression, anxiety disorders and substance abuse in veterans with chronic PTSD.

The ECA Study of Vietnam veterans documented a higher rate of posttraumatic stress disorder in wounded Vietnam veterans (Helzer et al. 1987). Similar findings were noted in the Veterans Administration's study (Kulka et al 1990; Kulka et al. 1991). Greater exposure to combat in Vietnam was also significantly related to higher rates of posttraumatic stress disorder, depression, and alcohol abuse (Kulka et al. 1990). In an interesting study, Goldberg et al. (1987) studied monozygotic twins discordant for service in Vietnam. Of the twins who had served in Vietnam, 16.8% had posttraumatic stress disorder, in contrast to only 5% of the twins who had not served. There was a nine-fold increase in the prevalence of posttraumatic stress disorder in the twin exposed to high levels of combat in Vietnam compared to their non-combat sibling.

GAPS IN EMPIRICAL KNOWLEDGE OF THE STRESS & HEALTH EFFECTS IN MILITARY WOMEN

Despite a large body of literature on responses to stress there are substantial gaps in our current understanding of the stress effects in military women and the design and implementation of intervention programs effect performance associated with combat, deployment, contingency operations and trauma. In response to this need, we have brought together both the clinical and research issues of acute and long-term posttraumatic responses. We go beyond PTSD to examine other posttraumatic disorders and responses, the mechanisms of transmission of posttraumatic stress and its effects on behavior and health in women in the military. Particular attention is paid to the array of responses in military women to several different traumatic and disaster events.

We introduce the idea of the importance of examining common threads connecting responses in women across stressors and common threads connecting responses to stress in both women and men in the military. To gain a better understanding of these issues we turn now to the elements that make up the common threads. The primary units of analysis are illustrated by the Venn diagrams in Figure 1.

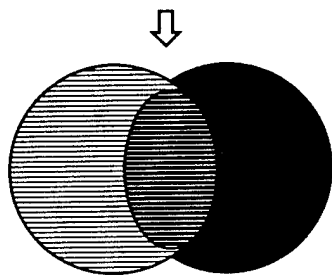
Most important to the study of common threads across stressors, is the examination of the variation in response to trauma that is accounted for by variation in the nature and severity of stressors. It becomes clear that accurate assessment of variance due to stressor differences is highly dependent on assessment of the contribution of other variables to the variance. To understand what contributes to variation of response to stress one must examine variables in the context of other potential contributors to response variation. Therefore, a multivariate approach is needed.

Figure 1

COMMON THREADS ACROSS STRESSORS & ACROSS GENDER

Stressors A & B

Common to Stressors A & B

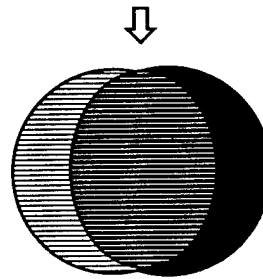


Unique to Stressor A

Unique to Stressor B

Across Gender

Common to Females & Males



Unique to Females

Unique to Males

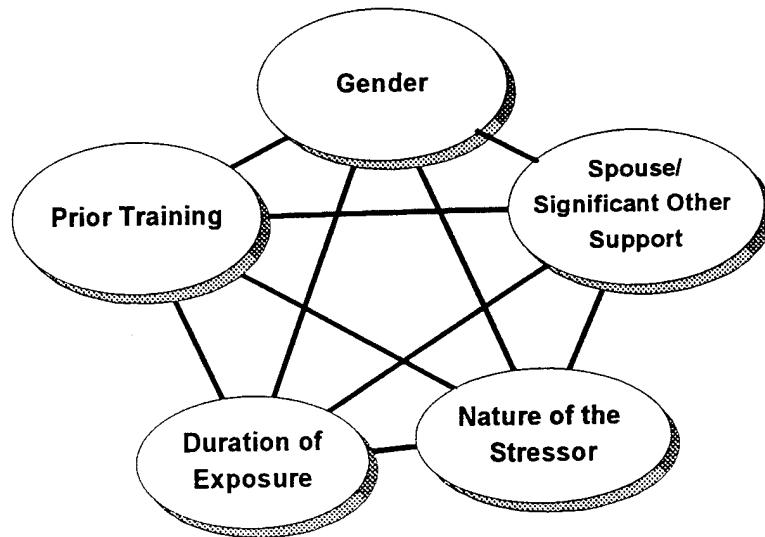
Multivariate Modeling**Gender as a Classifying Variable**

FIGURE 2. *Hypothetical web-like configuration representing patterns of interaction of predictor variables that mediate quality influence of four variables. The mediating effect of gender on response to working with dead bodies.*

The empirical studies reported in this volume each speak to the issue of within-group and between-group variation in response to traumatic events. Keeping this notion in mind, the various reports will reveal an intricate weaving of the elements that make-up the common thread in responses of military women to trauma and stress. What will become clear will be some of the potential underlying mechanisms or the elements leading to important directions for future empirical investigation of military women's health and stress-related responses.

We examined the unique responses of military women across services in five different settings: (1). deployment on the USS Comfort during the Persian Gulf War; (2). traumatic relocation from Homstead AFB in the wake of Hurricane Andrew; (3). health care & disaster workers following the 1988 Air Show Crash at Ramstein AFB, Germany; (4). spouses of military disaster workers following the

Introduction

1989 United Airlines crash, Sioux City, Iowa; (5). combat support troops assigned to Ft. Ord, California, & Ft. Carson, Colorado.

OVERVIEW OF THE STUDIES

Fort Ord & Fort Carson. We examined active duty army troops from Fort Ord and Fort Carson (N=2367 with 435 women) addressing garrison stressors and mental and physical health. We used standardized measures used in many epidemiological studies, e.g., the General Health Questionnaire (GHQ), Physical Health Practices (PHP), the Combat Stress Scale, as well as measures of unit cohesion and confidence, social supports and family life.

USS Comfort deployment to the Persian Gulf War. Women deployed on the USS Comfort during Operation Desert Storm (N=200, 35% women). Data during deployment and follow-up data were examined.

Hurricane Andrew. Homestead Air Force Base personnel after Hurricane Andrew (N=243, 10% active duty women; spouses of active duty men, N=145) and matched control groups from MacDill and Shaw AFB (N=139, 10% active duty women; and spouses of active duty men, N=80).

Sioux City, Iowa, United Airlines plane crash. We examined our data on the disaster workers (185th Air National Guard Fighter Group) and their spouses. We have data from a matched control group at the Air National Guard Unit in Sioux Falls, South Dakota. The groups were matched by mission and sociodemographics of the communities. Approximately 10-15% of each of these groups are women. In addition, a sample of women indirectly exposed to the trauma of the crash (spouses of the ANG groups) is available. Thus we examined both high direct exposure to the air crash and indirect trauma exposure in the spouses using matched control groups.

Ramstein AFB Flugtag. The 1988 Italian Air Show crash at Ramstein AFB. We have data from people involved at the Ramstein Medical Clinic (N=121). We also have data from personnel at nearby Landstuhl Medical Center who treated victims of the disaster (N=233). Approximately 35% of each of these groups are active duty service women.

Table 3: SUBJECTS & SAMPLE SIZES

TRAUMA STUDIES	FEMALE	MALE	TOTAL
FT. ORD/FT. CARSON	435	1,932	2,367
HURRICANE ANDREW			
A. Exposed (Homstead AFB)			
1. Active Duty	23	220	243
2. SSOs	141	4	145
3. Adolescents	35	19	54
B. Controls (Shaw/McDill AFB)			
1. Active Duty	139	19	120
2. SSOs	80	75	155
3. Adolescents	17	15	32
USS COMFORT	111	138	249
SIoux CITY PLANE CRASH			
A. Worker	24	183	207
B. Non-Worker	14	87	101
C. Worker/Non-Worker SSOs	186	10	196
D. Controls	58	363	421
E. Control SSOs	241	14	255
RAMSTEIN	126	228	354

Chapter 1

Gender Differences in Stress Perception, Coping & Emotional Responses to Gulf War Deployment

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I. BACKGROUND

Individuals are motivated to pursue happiness, pleasure or a state of well being. They acquire certain resources or conditions which make it easier for them to achieve these states. Money, status, favors from friends are examples of such resources. (Hobfoll, 1989) In fact, people may even try to stockpile resources because they are likely to increase the possibility of positive reinforcement at some future time.

According to this view, psychological stress occurs when individuals experience resource loss or threatened loss. (Hobfoll, 1989). Resources are "the single unit necessary for understanding stress...those objects, personal characteristics, conditions or energies that are valued by the individual or that serve as a means for the attainment of these objects, personal characteristics, conditions or energies." (Hobfoll, 1989, p. 516) Loss may involve control or the loss of one's valued peers, for example.

Resources are of various types: object resources: such as a home; conditions: such as marriage, higher rank or social support/ social integration; personal characteristics: such as an appropriate coping mechanism or locus of control; energies: those things which aid in the acquisition of other resources; these are time, money, knowledge, information, experience.

We have placed social support in the conditions category, but Hobfoll (1989) does not place it in any group; he says that it has aspects of a condition resource or an energy resource when it is

helpful, but he cautions that it is not always useful, and may, in fact, be a source of stress. Marriage, too, to the extent that it is valued is a resource, but not all marriages are treasured by the partners.

Resources are not equally available to all members of the population and those who lack them are subject to further resource loss. This has been called a loss spiral. The enlisted person without friends or without the social competencies to make friends may have little access to information which would facilitate his or her adjustment to a particular duty station or military occupational specialty.

Transitions have the possibility of being stressful, because transitions, like the old adage of the Chinese view of crisis, have in them the potential for stress or opportunity. When successfully met, they may become stress inoculations. (Hobfoll, 1989)

Nowhere have transitions been so evident than in the military environment. Basic military training (bmt) is stressful because it marks the transition to a new way of life. In their now-classic studies of the stress of bmt, Marlowe (1959) and Dattel (1966) have shown, using participant observation and adjective checklists respectively, that stress remains high until about week four when the new recruits gain mastery of their environment during training in small arms fire.

Deployment may be another transition. It requires adaptation to another style of life, but, unlike basic training, it holds many

more serious consequences if there is a failure to adapt. Examples of such consequences are the loss of one's life or psychological stress in reaction to the deaths of one's comrades, i.e. post-traumatic stress disorder (ptsd).

This also brings about the notion of gain spirals which Hobfoll (1989) does not mention but which the authors believe also exist. Folk wisdom says that the rich get richer. Individuals who successfully negotiate their way through a deployment have that experience on their military records facilitating their promotions and opening other doors as well.

Little is known about the stress felt or adaptation shown in a war zone environment by men and women exposed to the same set of circumstances. (Wolfe, 1993) In writing about psychopathology, Kulka et al. (1990) note that rates of ptsd have been found to be 30.9% for men and 26.9% for women in Vietnam, but the actual environmental causes are different. For men, these rates reflect the intensity of combat with loss -- frequently gruesome -- of comrades and of safety. For women, these involve the caregiving role of nurse.

Wolfe and colleagues write, "Because there are few data on the nature of their wartime exposure, investigation of female veterans' experiences offer the opportunity to examine whether their stressor exposure resembles that of male cohorts or whether existing conceptualizations of wartime stress should be broadened or refined." (Wolfe et al., 1993, p.330)

Life on board a hospital ship during deployment offers a

relatively controlled environment in which the effects of stressors can be studied across various groups including men and women. Investigators have considered hospital personnel to be unusually motivated to serve as subjects in health studies because of the participants' understanding of the potential benefits of such activity to others. And, so, investigators have devoted entire studies focusing on such groups as nurses (Colditz, Martin & Stampfer, 1986) or physicians (Steering Committee on the Physicians Health Study, 1989).

Aside from this theoretical concern, there are very practical reasons for studying the responses of hospital ship personnel. Their reactions to the war zone, if poor, may limit their ability to care for the military sick and injured. Hobfoll (1989) summarizes this nicely by writing, "employing resources for coping is also stressful in itself. ... studies have found that people who were placed in a position in which they were required to give support at a time when they themselves needed support, experienced increased psychological distress" (pp.518-519). Therefore, it would make sense to make the hospital ship environment as resource rich as possible.

In order to do this, we study the coping resources and emotional reactions of a group of military medical personnel onboard ship during the Gulf War. The USNS Comfort deployed unexpectedly to the Gulf War Crisis on 13 August 1990 as a hospital ship. In September 1990, those who were deployed in August were surveyed.

Dineen and colleagues write of the crew's response to the news of deployment, " [they] had little or no time to adjust to the idea of shipboard life and isolation from family and friends. Ninety percent of the crew had never deployed, and most never expected to go to sea" (Dineen et al., 1995) [since most had shore billets prior to deployment]. This seems to qualify as a transition.

It is our purpose to examine these effects by gender in order to determine to what extent resources in the future must be tailored by sex.

We now briefly review the nature of gender differences in the civilian world and we mention how these variables may effect outcomes of interest in military settings.

1. Gender differences in coping: Conventional wisdom suggests that men are higher in problem-focused coping while women are masters of emotion focused styles. Folkman and Lazarus (1980) in their community study found that, contrary to expectation, there were no gender differences in emotion focused coping. Men exhibited higher problem focused coping only in work situations and in situations that had to be accepted. This led investigators to conclude that there were very few gender differences in coping in actuality.

Nonetheless, this study did find differences in the types of events which the sexes found to be stressful. Men reported more work incidents while women related more family and health episodes.

In the military, Vietnam era military nurses who reflected on their coping during their duty tours and who evidenced patterns

of seeking social support, expressing feelings and searching for meaning exhibited good present psychological functioning. (Leon, Ben-Porath and Hjemboe, 1990).

2. Gender differences in social support: In their review of this topic, Shumaker and Hill (1991) note that men consider their wives to be the quintessential sources of support while women are connected to social support networks which are wider, more multifaceted and more multi-functioned than those of men. These effects described for women are even more true for working women than for homemakers.

However, women may be more prone to the negative effects of being involved in large social networks; these may involve more demands and depletion of resources.

Psychologist Robert Stretch and colleagues (1985), in their study of Vietnam War nurses, found that social support, both during the nurses' Vietnam tours and on return home from the war, ameliorated the effects of the war and that it accounted for more variance in predicting PTSD symptoms than did perceived danger and exposure to violence combined, which were also significant effects in predicting such symptoms.

3. Gender differences in emotional responses: Even in spite of some confounding variables, Wool and Barsky (1994) note that women do seem to somatize more than men. Women are more likely than men to be depressed (Robins, Locke & Regier, 1991). Moreover, they exhibit more panic disorder, phobia, and obsessive compulsive disorder than men (Cleary, 1987) although men present with more instances of

personality disorder, substance abuse and suicide.

Depression in women may be particularly important in predicting future acute stress disorder in disasters, found investigator Carol North (1995)

4. Gender differences in health care utilization: Verbrugge (1989) notes that while women live longer than men, women have higher rates of physical illness, disability days, physician visits and prescription and non-prescription drug use than men. Men, on the other hand, have higher rates of injury than women.

II. METHODS

A. The Sample

The USNS Comfort deployed unexpectedly to the Gulf War Crisis on 13 August 1990 as a hospital ship. Investigators endeavored to survey all health care personnel (N=504) who deployed during the dates of 13 and 23 August 1990. The actual time of the first survey was September 1990. Forty-nine and six tenths of the subjects responded (N=250). 55.4% were male (N=138) and 44.6%, female (N=111).

The following is a description of the scales and other questions given to respondents at that time and on which we report. A copy of the entire questionnaire is given in Appendix A.

B. The Measures

B.1. The SCL-90

In order to measure affective state and psychopathology investigators used the 90-item SCL-90 developed by Derogatis and colleagues (1976), using psychiatric and medical outpatients. Respondents are asked to rate themselves on a number of symptoms using a 5-point Likert scale ranging from "not at all" (0) to "extremely" (4). Items are then grouped on nine dimensions of Somatization, Obsessive-compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. There are, in addition, three other measures which are available, the Global Severity Index, the Positive Distress Index and the Positive Symptom Total.

Coefficient alpha reliabilities have ranged from .90 for the depression subscale to .77 for the psychoticism dimension (Derogatis, Rickels and Rock, 1976), with most in the .80 range.

Investigators at USUHS have added an additional 15 trauma-related items to the scale.

B.2. Ways of Coping

Ways of Coping is a 67-item scale designed to ascertain the styles of thinking and behavior that individuals use in appraising a stressful situation. Respondents were asked to rate themselves on each strategy by indicating whether it was "not used" (scored 1) to "used a great deal" (scored 4). (Folkman et al., 1986 .

Responses can be grouped into eight subscales: confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem-solving and positive reappraisal. Internal consistency reliabilities, in the published literature, have ranged from .61 for distancing to .79 for positive reappraisal (Folkman et al., 1986). The coping strategy individuals choose to use has been shown to vary according to cognitive appraisal and it differentiates encounter outcomes.

Subsequent work has shown that the subscales can be factor analyzed into two factors and a variable, i.e. there is the problem-focused factor comprised of seeking social support, problem solving, positive reappraisal, and confrontive coping. A second factor is composed of distancing, escape/avoidance and accepting responsibility and it may be called emotion focused.

One subscale does not load heavily on either factor: self-control. Various types of social support have been shown to be differentially related to these two factors (Dunkel-Schetter, Folkman and Lazarus, 1987).

B.3. Comfort-specific Stressors

The following questions were asked to measure this dimension:

How stressful have the following items been to you on this deployment? (1=not at all stressful, 7=extremely stressful)

- 1.Heat
- 2.Separation from Family
- 3.Fear of Fire
- 4.Fear of Terrorist Attack
- 5.Fear of Ship Sinking
- 6.Fear of Your Own Death
- 7.Fear of the Death of Others
- 8.Fear of Caring for Combat Casualties
- 9.Fear of the Unknown
- 10.Other _____

B.4. Comfort-specific Stress Reducers

This construct was evaluated in the following way:

How helpful are the following leisure activities in reducing stress? (1=not at all helpful, 7=extremely helpful, 8=not applicable).

- 1.Gym
- 2.Movies
- 3.Eating
- 4.Weather Decks
- 5.Lounges
- 6.Reading
- 7.Time alone
- 8.Library
- 9.Socializing with Friends
- 10.Reading Mail
- 11.Writing Mail
- 12.Other _____

B.5. Prior Operational Experience

The following questions were asked to assess prior background:

1. Have you had sea duty prior to the USNS Comfort deployment?
(1=yes, 2=no)
2. Have you had isolated duty prior to the USNS Comfort deployment? (1=yes, 2=no)
3. Have you had prior experience in the Middle East? (1=yes, 2=no).
4. Have you ever participated in a disaster or mass casualty event? (1=yes, 2=no)
5. Have you ever worked with dead bodies? (1=yes, 2=no)
6. Have you ever had a patient die while in your care?
(1=yes, 2=no)
7. Please indicate your participation in these Operational Readiness Training Experiences (1=yes, 2=no).
 1. FMSS (Fleet Marine Force)
 2. ACLS
 3. ATLS
 4. C4
 5. Damage Control Training
 6. Shipboard Orientation
 7. MMART Team Experience
 8. RADNUP Training
 9. MEDSTAR (Trauma Surgery) Training
 10. IDT
 11. Other _____
8. Have you worked with any Desert Shield casualties (1=yes, 2=no).

B.6. Social Field Stress

Investigators used the following Likert scale to assess this factor:

Many people experience stress and/or concern during times of deployment. Using the scale provided, rate the degree of STRESS you believe each of the individuals listed below experienced during the week you were deployed. (1=none, 7=a great deal, 8=not applicable):

1. You, yourself
2. Your spouse/significant other
3. Your children
4. Your supervisors
5. Your coworkers

B.7. Social Support

The degree of social support received from individuals both during deployment and during the past week were measured in the following way:

FOR THE WEEK YOU WERE DEPLOYED, please indicate the degree of support or lack of support -- emotional or practical -- you felt from each of the following individuals. Circle the number that best applies for each item. (1=very unsupportive, 5=very supportive, 6=not applicable).

1. Family
2. Friends
3. Coworkers
4. Supervisors

In the PAST WEEK, please note the degree of support or lack of support -- emotional or practical -- you have felt from each of the following individuals. Circle the number that best applies for each item. (1=very unsupportive, 5=very supportive, 6=not applicable).

1. Family
2. Friends
3. Coworkers
4. Supervisors

B.8. Perceived Social Support

Perceived social support from family and friends was assessed using Procidano and Heller's Perceived Social Support Scales (1983). These scales are 20-item self-report instruments designed to measure the extent to which the individuals perceive that their needs for support, communication and sharing are met by family or friends. Reliability and validity assessments indicate that these are valid constructs (Procidano and Heller, 1983) that are reliable and generalizable to different populations (Lyons et al., 1988)

B.9. Physiological Arousal/Medical Care

Fatigue, sleep, weight gain and medical care were assessed by the following items:

1. Approximately how many hours of sleep did you average per day during the past week? _____ hours

2. Have you gained or lost any weight since you were assigned to the USNS Comfort?

1. Yes, gained weight
2. Yes, lost weight
3. No, I weigh about the same

3. Rate how fatigued you felt the FIRST WEEK ON BOARD the USNS Comfort.

1	2	3	4	5	6	7

not at all fatigued			somewhat fatigued		extremely fatigued	

4. Rate how fatigued you felt THIS PAST WEEK.

1	2	3	4	5	6	7

not at all fatigued			somewhat fatigued		extremely fatigued	

III. RESULTS

A. Description of Respondents

A.1. Demographics

250 hospital personnel aboard the Comfort chose to respond to survey. They ranged in age from 18 to 55. The positively-skewed distribution had a mean age of 28.5 years with a median of 26 years. 55% of the respondents were male; 44% were female.

Respondents were predominately white (79%) with 11% being African-American, 5.8%, Hispanic, and 3.3% oriental. Over half (54%) were never married, while 30% reported being in first-time marriages. 6% were either divorced and remarried or divorced and living with a significant other while 4% were separated or divorced and not remarried. 3.6% were single and living with someone. Over 32% reported having children; of these the number of children ranged from one to four with 86% having one or two.

With respect to education, 3.5% never graduated from high school; 26% were high school graduates and 26% reported having some college. Bachelor's degrees were held by almost 33% with a remaining 11% having M.A.s or doctorates.

Regarding rank, 39.1% of respondents were E1-E4's; another 10.9% were E5-E9. Officers comprised almost an additional 50% of those answering the survey. Rank O1-O3 composed 29.4% of the total group with officers in the O4-O6 group making up 18.2% of the respondents. An additional 2.4% were comprised of other individuals.

Almost 48% were hospital corpsmen with the next largest occupational group being nurses (almost 35%). Doctors comprised 7.9% of the group and the remaining 11% were in other occupational groups.

A.2. Prior Experience

82% reported no sea duty prior the Comfort deployment while 87% had no isolated duty prior to deployment. Likewise, the majority (94%) had no prior experience in the Middle East. 68% had never participated in a disaster or mass casualty event. However, almost 73% had worked with dead bodies and almost as many (71%) had a patient die while in their care.

With regard to Operational Readiness Training Experiences, 85% reported no Fleet Marine Force experience. 57% did not have ACLS training. An even greater number (71%) had no Advanced Trauma Life Support (ATLS) training. 74% had no C4 readiness training. 54% had no Damage Control training. Nonetheless, 83% reported having had shipboard orientation.

89% had no MMART team experience while 90% had no RADMUF training. 95% had no MEDSTAR (Trauma Surgery) training and 97% had no IDT training. Almost 50% reported some other type of readiness training. 75% noted that at the time they answered the survey they had worked with Desert Shield casualties.

A.3. Physical Health and Medical Care

Respondents rated themselves as being, on average, more than somewhat fatigued during their first week on board the Comfort (4=somewhat fatigued, mean rating was 5.24). At the time they

answered the survey they felt, on average, somewhat fatigued (mean rating was 4.27). When asked the number of hours of sleep they averaged per day in the past week, responses ranged from three to twelve hours, with a mean of 6.6 and a median of 6 hours.

31% reported they had gained weight since their assignment to the Comfort while 31% noted that they had lost weight. And the remaining 37% stayed the same.

The majority (95%) did not have an annual physical since coming onboard the Comfort. However, 57% did report seeking medical care for a physical problem while only 7% sought care for an emotional problem. Only 12% indicated that they felt they were in need of medical care but did not obtain any.

B. Univariate Comparisons by Sex

[Note: Actual tables from this section may be found in Appendix B, Tables B.1-B.30. and Tables B.89-B.94]

B.1. Demographics

Of those who responded to the Comfort survey, women tended to be older (i.e. between 26 and 55) and men were younger (Chi-square=5.724, df=1, p=.017).

The majority of the health personnel respondents were white --at least 3/4. Proportionally, there were more white females than there were white males. Of the minorities, men were more likely to be African-American and Hispanic while women were more likely to be African-American. (Chi-square=10.347, df=4, p=.035).

The women were more educated with half having BAs. This is probably consistent with their status as nurses. The majority of men were either high school graduates or had some college training (Chi-square=55.930, df=4, p=.000).

The majority of women were single -- never married -- over 3/5 with only 1/2 men in the never married category. Moreover, proportionally, twice as many men as women were in the first-time married category (38% vs 20%) (Chi-square=12.582, df=5, p=.028). Accordingly, given their marital status, over 3/4 women were likely to be childless relative to 3/5 of the men (Chi-square=8.217, df=1, p=.004)

Of those having children, there were no statistically significant differences between the sexes in the number of children each reported having (Chi-square=1.638, df=3, p=.651). Over 85% reported having two children or less.

B.2.Operational Experience and Training

Women were less likely to report having prior sea duty (Fisher's exact test p=.000). Over nine out of ten of the women said they had no such experiences relative to seven out of ten of the men. There were no statistically significant differences between the sexes in whether they had worked before in the Middle East environment; the majority of both said they had not (Fisher's exact test p=.274).

Concerning Desert Shield experiences, far more of the men (4/5) reported having worked with such casualties than the women (2/3) (Fisher's exact test p=.011).

More men reported isolated duty experience (Fisher's exact test $p=.082$) and participation in mass casualty/disaster event (Fisher's exact test $p=.038$). Nonetheless, the majority of respondents of both sexes had no such experiences. Women, on the other hand, were more likely to report having had patient die who was in their care (Fisher's exact test $p=.035$).

There were no statistically significant differences between the sexes in having worked with dead bodies; about seven out of ten of each sex had (Fisher's exact test $p=.775$) such a background.

More women than men reported no experience with field medical support school, although a majority of each sex had not (Fisher's exact test $p=.000$).

There were also statistically significant differences between the sexes in the numbers reporting advanced cardiac support training; more women reported yes (50:50) than men (Fisher's exact test $p=.057$). However, three out of five males had damage control training while seven out of ten women had not (Fisher's exact test $p=.000$).

More men than women related having mobile medical acute response training (Fisher's exact test $p=.009$) and trauma surgery training (Fisher's exact test $p=.04$) -- although the majority of both sexes did not.

There were no statistically significant differences between the sexes in experience as an independent duty technician (Fisher's exact test $p=.062$), in RADMUF training (Fisher's exact

test $p=.152$), in the completion of courses dealing with command combat casualty (Fisher's exact test $p=.116$) and advanced trauma life support (Fisher's exact test $p=.285$). The majority of each sex had no experience or training in these areas. On the other hand, over eight out of ten of each sex had shipboard orientation (Fisher's exact test $p=.389$).

B.3. Perception of Stressors

In the Gulf War, heat was a significant problem. There were no significant differences between men and women in their perception of this stressor (Fisher's exact test $p=.871$); approximately 81% of each group rated this factor as being moderately to extremely stressful. Likewise, separation from family was perceived as being moderately to extremely stressful for over 85% of each sex (Fisher's exact test $p=.323$).

On the other hand, there were differences between the sexes in their reports of the stressfulness of fear of fire (Fisher's exact test $p=.026$). Three out of four of the men reported no or little fear relative to over 60% of the women.

Another stressor in which men differ from women is that of fear of terrorist attack (Fisher's exact test $p=.001$). Over seven out of ten men felt little or no concern regarding this factor relative to approximately 50% of the women.

There were also differences -- approaching statistical significance -- in the numbers of men reporting little to no fear of the ship's sinking (77%) versus the number of women indicating that this was a concern (66%) (Fisher's exact test $p=.111$).

Comfort hospital ship personnel were also queried regarding fear of death -- their own and that of others. There were statistically significant differences between the sexes regarding fear of their own deaths (Fisher's exact test $p=.003$). Sixty-eight percent of the men expressed little or no fear of their own demise in contrast to fifty percent of the women. Likewise, there were statistically significant differences between the sexes regarding the fear of the death of others (Fisher's exact test $p=.00001$). Over 70% of the women reported moderate or extreme levels of stress while over 50% of the men noted little or no stress on consideration of this factor. Similarly this pattern of responses holds for queries regarding the stress of handling combat casualties, i.e. over three out of four of the women note moderate to extreme stress in this area while over half the men, again, report little or no stress (Fisher's exact test $p=.000001$). This may be due to the high proportion of women who were nurses; nursing is a profession which emphasizes responsibility for patient care as part of its socialization.

More women reported high levels of fear of the unknown than men (Fisher's exact test $p=.0001$); 86% of the women versus 64% of the men.

B.4. Stress Reducers

There were statistically significant differences between the sexes in their perception of the helpfulness of the gym in reducing stress (Fisher's exact test $p=.004$). 83% of the men and 66% of the women found this place to be moderately to extremely

helpful in stress reduction.

There were also significant differences between the sexes in reported helpfulness of the weather decks in reducing stress (Fisher's exact test $p=.0004$). Fully, 92% of the women and 75% of the men noted that this outdoor area was moderately to extremely helpful. There does seem to be a slight tendency for women to prefer the weather decks and the men, the gym.

The opportunity to get away from it all has been explored in several questions. There were no statistically significant differences in the rated helpfulness of reading; 81% of the men and 79% of the women noted this as moderately to extremely helpful (Fisher's exact test $p=.743$). Moreover, the group was split almost 50:50 regarding perceptions of the library's value; there were no statistically significant differences by sex (Fisher's exact test $p=.182$). Movies, on the other hand, were reported to be moderately to extremely helpful to 77% of the men and only 56% of the women. This difference is statistically significant (Fisher's exact test $p=.0006$). This particular constellation of differences may be due to the type of movie being shown, to the greater room afforded women who may be preponderantly officers and to officer-enlisted differences in the pursuit of leisure activities.

Social support can function as a stress reducer. Comfort survey responses lend support to that finding. A vast majority of both men (92%) and women (89%) note that socializing with friends was moderately to extremely helpful in dealing with stress. There

were no differences between the sexes in their ratings of the importance of this activity (Fisher's exact test $p=.497$).

Lounges do not seem to be places where a great deal of socializing occurs. Almost half of both men and women rated this activity as of no or little help in stress reduction (Fisher's exact test $p=.562$).

Regarding support from the outside, if separation from family was uniformly rated as stressful, then reading and writing mail was a saving grace to Comfort crew members. 94% of the men and 93% of the women noted that reading mail was moderately to extremely helpful. As expected, there were no differences between the sexes on their rating of this event (Fisher's exact test $p=1.000$). Moreover, the majority of both groups (88% for men and 86% for women) related that writing mail was likewise helpful. Again there were significant differences between the sexes here (Fisher's exact test $p=.562$).

It may seem paradoxical that time spent alone was also rated highly by both groups; 86% of the men and 88% of the women felt it was moderately to extremely helpful. (Fisher's exact test $p=.698$). However, Dineen, Pentzien and Mateczun (1994) in their description of life aboard the Comfort note that lack of privacy was a significant concern for hospital staff.

Finally, there were no significant differences in the responses of men and women to the stress-reducing properties of eating. About half of each group rated this factor as moderately to extremely helpful (Fisher's exact test $p=.361$).

B.5. Physiological stress/arousal

There were no differences between the sexes in the numbers reporting a weight change. Roughly a third of each noted that they had gained weight, lost weight or stayed the same (Chi-square=.159, df=2, p=.923).

Responses to hours of sleep could categorize individuals into short, normal or longer sleepers according to criteria defined by Kaplan, Saddock & Grebb (1994). Anyone sleeping from six to nine hours was seen as normal; sleep less than that was categorized considered be short; more than nine hours, as long. There were no statistically significant differences between men and women in the amount of sleep reported (Chi-square =.775, df=2, p=.679). Over 70% of each sex fell in the range of six to nine hours.

Women reported feeling more fatigued the first week of deployment ($t=-4.3267$, df=245, $p=.0000$) and were also more tired than men during the past week ($t=-2.9768$, df=242, $p=.0032$).

Stress, coping and physiological symptoms are likely to result in more physician visits. Comfort staff were asked to indicate whether they received various types of medical care.

With regard to annual physical exam, there were no statistically significant differences in the number of men and women reporting having one (Fisher's exact test $p=.146$). Three percent of the men and 7% of the women indicated "yes" to this question.

Nonetheless, women were more likely to report having medical

care for physical problems (Fisher's exact test $p=.038$). 64% of the women relative to 50% of the men noted that they needed such attention. This was not true for medical care for emotional problems. Few individuals of each sex reported problems with these issues (Fisher's exact test $=.128$) -- 10% of the women and almost 5% of the men. Nor were there any differences in the numbers of men and women needing -- but not receiving -- medical care (Fisher's exact test $p=.543$). Again, these percentages were small (10% for men and 14% for women).

B.6. SCL-90 Mood

Sex differences in four mood subscales of the SCL-90 were investigated. There were no statistically significant differences between the sexes in their answers to somatization questions ($t=-.8090$, $df=224$, $p=.4194$) and to the hostility subscale ($t=1.1884$, $df=224$, $p=.2359$). Women did report that they were more anxious ($t=-2.3717$, $df=223$, $p=.0186$) and more depressed ($t=-1.9973$, $df=223$, $p=.0470$) than their male counterparts.

B.7. Ways of Coping

Men reported more acceptance of responsibility than did women ($t=2.9696$, $df=224$, $p=.0033$). There were an additional two subscales where the difference between men's responses and those of women approached statistical significance. Men related more confrontive coping ($t=1.9611$, $df=220$, $p=.0511$); and more planful problem solving ($t=1.6692$, $df=222$, $p=.0965$).

There were no statistically significant differences between the sexes in their responses to escape-avoidance, positive

reappraisal, distancing, self-controlling and seeking social support ($t=-.8817$, $df=219$, $p=.3789$; $t=-.7479$, $df=216$, $p=.4553$; $t=1.3341$, $df=216$, $p=.1836$; $t=-.4483$, $df=221$, $p=.6544$; $t=-1.2253$, $df=220$, $p=.2218$, respectively).

B.8. Social Field Stress

Women related more stress to the news of their deployment experienced by themselves ($t = -5.6318$, $df=242$, $p=.0000$); by their children ($t=-3.5532$, $df=217$, $p=.0005$); by their supervisors ($t=-4.0778$, $df=236$, $p=.0001$) and by their coworkers ($t=-3.9613$, $df=237$, $p=.0001$) than men. There were no significant differences between the sexes in their ratings of stress experienced by spouses ($t=.9530$, $df=199.6$, $p=.3418$), however.

B.9. Social Support

As noted earlier, social support has been shown to be significant buffer against the vicissitudes of life. Respondents were asked to indicate the supportiveness of various individuals in their social fields in the past week and during the week of deployment.

During the week of deployment -- women reported more support received from friends ($t=-2.9169$, $df=238$, $p=.0039$); from coworkers ($t=-3.1529$, $df=240$, $p=.0018$) and -- approaching significance-- from supervisors ($t=-1.7938$, $df=235$, $p=.0741$) than did men. There were no significance differences in support noted from family ($t=.0234$, $df=242$, $p=.9814$). This was true despite the fact that women saw these same individuals as being more stressed by their leaving.

On the other hand -- during the past week -- there were no differences in reported support from family ($t=-.9722$, $df=232.5$, $p=.3320$); from friends ($t=-.2032$, $df=238$, $p=.8391$); from coworkers ($t=-1.3760$, $df=237$, $p=.1701$) or from supervisors ($t=-.8834$, $df=232$, $p=.3779$) between the sexes.

This pattern of responses is further sustained by scores on measures of perceived social support from significant others and from friends. As before, women reported more support from friends ($t=-4.0522$, $df=233$, $p=.0001$) than did men, but there were no differences in perceived support from significant others ($t=1.3100$, $df=169$, $p=.1920$).

C. Factor Analysis

We submitted responses to the nine-item, Comfort-specific stressors to exploratory factor analysis. The method of factor extraction was principal factors using one as the prior communality estimate. The factors were then subjected to an uncorrelated or orthogonal rotation. First, we used responses from all respondents, a total of 239 out of 250 people. Using an eigen value of 1.00 as a cutpoint, three factors were retained.

An item was said to load on a factor if its correlation with the rotated factor pattern was greater than or equal to .40. According to this criterion, five items were said to load on factor one: fear of fire stress, fear of terrorist stress, fear of dying, fear of the ship's sinking and fear of others' deaths. This we called the injury factor and it accounted for 66% of the common factor variance. The actual loadings are shown in Table 1.

Table 1: Rotated factor pattern and communality estimates from principal factor analysis of total respondents to Comfort-specific stressors. Orthogonal rotation. Comfort survey, time 1.

Rotated Factor Pattern

Item	FACTOR1	FACTOR2	FACTOR3	Communalities
Heat stress	0.11251	0.07224	0.87216	0.778546
Separation from family	0.17025	0.35991	0.16752	0.186589
Fear of fire	0.77894	0.15946	0.18140	0.665080
Fear of terrorists	0.78980	0.20190	0.06399	0.668648
Fear of ship sinking	0.90375	0.12647	0.04677	0.834952
Fear of dying	0.61778	0.33597	0.04008	0.496131
Fear of others' deaths	0.40307	0.60350	0.02612	0.527360
Combat casualties stress	0.06390	0.66964	-0.03391	0.453644
Fear of the unknown	0.16796	0.80411	0.07228	0.680034

Variance explained by each factor 2.665356 1.789044 0.836585

Final Communality Estimate: Total = 4.673443

The second factor was composed of three items: combat casualties stress, fear of the unknown and fear of the death of others. This accounted for an additional 20% of the common factor variance. We felt that for our hospital personnel respondents this factor dealt with having to master performance demands, so we named it the trauma-related work demands factor.

Heat stress was the only item that loaded highly on the third factor. It accounted for 14% of the common factor variance.

One item, separation from family stress, although rated as highly stressful by both sexes, did not load highly on any factor.

We then did another factor analysis omitting the heat stress and separation from family stress items which did not cluster with any other variables during the first factor analysis. The methods we used were the same: principal factors with a varimax rotation.

This time we ended up with two factors-- our original injury factor and the work demands factor. The first factor now accounted for 77% of the common factor variance; the second, for 23% of the common factor variance. Items loading on each factor were the same.

C.1. Factor analysis by sex

We then divided the respondents by sex and did a separate factor analysis for males and females using the same procedures described above. Complete responses were available to the stressors scale for 128 out of 138 of the male respondents.

Results are shown in Table 2. As with the total group, three factors were extracted. Four items loaded on factor 1: fear of fire, fear of terrorists, fear of the ship's sinking and fear of dying. This factor accounted for 60% of the common factor variance and once again might be considered an injury factor.

Factor 2 accounted for 25% of the variance and was composed of three items: fear of others' death, combat casualties stress and fear of the unknown. As with the total group, it seemed to address mastery of work demands.

And factor 3, representing 14% of the common factor variance, was comprised of only one item: heat stress. Once again, separation from family did not load highly on any one factor.

As we did before we removed the two items dealing with heat and separation from family stress and submitted the remaining items to another factor analysis. As before, all technical procedures were the same.

Once again we had the same items loading on the same two factors, injury and mastery of work demands. Factor 1 accounted for 71% of the common factor variance and factor 2, for almost 29% of the common factor variance.

We then turned to the female respondents. 110 subjects out of 111 women had complete responses available for the principal factor analysis (orthogonal rotation). Two factors were extracted; these were similar in concept to those found for males and the total group.

Factor 1 (injury) was composed of four items: fear of fire,

Table 2: Rotated factor pattern and communality estimates from principal factor analysis of male respondents to Comfort-specific stressors. Orthogonal rotation. Comfort survey, time 1.

Rotated Factor Pattern

Item	FACTOR1	FACTOR2	FACTOR3	Communalities
Heat stress	0.08854	-0.01600	0.78020	.616804
Separation from family	0.13481	0.37488	0.19701	.197524
Fear of fire	0.70294	0.10037	0.18497	.538414
Fear of terrorists	0.78494	0.14483	0.07002	.642015
Fear of ship sinking	0.88960	0.05102	-0.06825	.798649
Fear of dying	0.57470	0.31418	0.11388	.441957
Fear of others' deaths	0.30390	0.49997	-0.03241	.343379
Combat casualties stress	-0.01685	0.61637	-0.13214	.397658
Fear of the unknown	0.13401	0.82169	0.06258	.697042
Variance explained by each factor	2.368537	1.578212	0.726693	

Final Communality Estimate: Total = 4.673443

fear of terrorist attack, fear of the ships' sinking and fear of dying. It represents 79% of the common factor variance. Factor 2 (work demands stress) was comprised of four items: separation from family, fear of the death of others, combat casualties stress and fear of the unknown. With this factor 20% of the common factor variance was accounted for. Results are shown in Table 3. Heat stress did not cluster with any of the other items and did not load highly on either of the two factors.

It is probably significant that for women separation from family loaded highly with what we have come to call the work demands factor. However, in the subsequent factor analysis, we decided to remove both heat stress and separation from family stress as we did with the men because we felt that family concerns might provide differential responses between men and women in subsequent analyses and to put it in with work demands would be to bury important gender differences.

So, once again we submitted the remaining items to another factor analysis using the same technical procedures as before. Once again we extracted two factors -- the same two factors as before: injury, composed of fear of fire stress, terrorist attack, ship sinking and others dying and work demands encompassing fear of the death of others, combat casualties and fear of the unknown. Factor 1 represented 79% of the common factor variance with factor 2 accounting for an additional 20% of the variance.

What emerges from this series of analyses is a picture of the remarkable stability of the latent structures underlying responses to the Comfort-specific stressors. Injury and work demands. In fact if we turn these two factors into subscales we can examine their internal

Table 3: Rotated factor pattern and communality estimates from principal factor analysis of female respondents to Comfort-specific stressors. Orthogonal rotation. Comfort survey, time 1.

Rotated Factor Pattern

Item	FACTOR1	FACTOR2	Communalities
Heat stress	0.20344	0.26101	.109517
Separation from family	0.21581	0.41526	.219018
Fear of fire	0.84148	0.22821	.760167
Fear of terrorists	0.77777	0.24577	.665335
Fear of ship sinking	0.92931	0.18359	.897329
Fear of dying	0.62154	0.34962	.508539
Fear of others' deaths	0.44256	0.69741	.682239
Combat casualties stress	0.08813	0.67609	.464866
Fear of the unknown	0.16236	0.78550	.643379
Variance explained by each factor	2.880902	2.069486	

Final Communality Estimate: Total = 4.950388

consistency reliabilities in comparison to the coefficient alpha for the total scale items. These results are shown in Table 4.

Coefficient alpha for the original nine-item scale for all respondents is a very respectable .82. However, for the injury subscale it is now .87 -- somewhat higher than .82 especially given that the number of items has been reduced from 9 to 4 with this subscale, and, as the reader is aware, psychometric experts (Nunnally, 1978) maintain that longer scales make for more reliable ones. And the work demands subscale -- an even shorter subscale -- has an alpha reliability of .77.

Similar patterns hold for both men and women, although for men the total scale reliability is somewhat lower: .77 with the injury subscale alpha equal to .83 and that of the work demands subscale equal to .71. For women the internal consistency reliability for the total scale is .86; for the injury subscale, .89 and for the work demands subscale, .80. All of this point to the remarkable stability and internal consistency of the new subscales: injury and work demands.

Rather than using nine separate and distinct stressor variables or a stressor total score we decided to use the two factors (injury and trauma-related work demand) and the two items of heat stress and family separation as variables to be used in further analyses.

Responses to the Comfort-specific stress reducers were also submitted to factor analysis. Methods of factor extraction were the same except where specifically indicated, i.e. we used principal factor analysis with an orthogonal rotation.

For men, 128 out of 138 respondents had complete records. From this group, four factors emerged from the analysis. Factor one

Table 4: Internal consistency reliabilities for the Comfort-specific stressors for all items and for two factor subscales, Comfort dataset, time 1.

<u>Items</u>	<u>Coefficient alpha</u>		
	Total	Males	Females
Total scale (9 items)	.82	.75	.86
Injury subscale	.87	.83	.89
fear of fire			
fear of terrorist attack			
fear of ship sinking			
fear of dying			
Work demands subscale	.77	.71	.80
fear of others' deaths			
combat casualty stress			
fear of the unknown			

accounted for 56% of the common factor variance and was composed of two items: reading mail and writing mail. Two questions also loaded highly on factor two; these items were reading and time using the library. This reading factor accounted for almost 20% of the common factor variance. Factor three, making up over 12% of the variance, was comprised of three items: time on the weather decks, time alone and eating. We called this the self-soothing factor. And the final factor explained 12% of the variance. It was composed of going to the movies, eating and being with a friend. Two items did not load highly on any factors: going to the gym and using the lounges. (see Table 5.) This does not mean that these two events/stress reducers are worthless -- rather, they do not reflect a similar underlying trait or type of stress reducer and, in fact, they probably contribute something unique to life on the Comfort for men.

Eighty of the 111 observations were available for factor analysis among the women respondents. With them four factors -- although decidedly different from the men's -- emerged. Factor 1 accounted for over 42% of the common factor variance. It was composed of two items: reading and going to the library. Factor 2 was made up of variables dealing with the gym and going to the movies. This factor represented almost 28% of the variance. Eating and time spent alone constituted the third factor which explained an additional 17% of the variance. The fourth and final factor was formed of items reading and writing mail. This factor represented 12% of the variance. Three items did not load highly on any factor: weather decks, lounges and time spent with a friend. (Table 6). As with the men's view of lounges and the gym, these last three stress reducers probably represent something unique

Table 5: Rotated factor pattern and communality estimates from principal factor analysis of male respondents to Comfort-specific stress reducers. Orthogonal rotation. Comfort survey, time 1.

Rotated Factor Pattern

	FACTOR1	FACTOR2	FACTOR3	FACTOR4	Communalities
Gym	0.02527	0.28021	-0.05815	0.13550	.100896
Movies	0.05919	0.29084	0.13124	0.59636	.460960
Eating	-0.10195	-0.07395	0.53045	0.45522	.504473
Weather decks	0.18093	0.11581	0.68960	0.01194	.521843
Lounges	0.07023	0.34328	0.23759	0.30407	.271683
Reading	0.11406	0.88793	0.27076	0.09246	.883286
Time alone	0.35875	0.24613	0.48302	0.02532	.423227
Library	0.21357	0.43439	0.37137	0.16813	.400488
With friend	0.23012	0.14325	-0.01587	0.51869	.342762
Reading mail	0.91210	0.00300	0.13147	0.15300	.872620
Writing mail	0.63365	0.15252	0.12271	0.09323	.448530
Variance explained by each factor	1.525917	1.381305	1.311114	1.012432	

Final Communality Estimate: Total = 5.230768

Table 6: Rotated factor pattern and communality estimates from principal factor analysis of female respondents to Comfort-specific stress reducers. Orthogonal rotation. Comfort survey, time 1.

Rotated Factor Pattern

Item	FACTOR1	FACTOR2	FACTOR3	FACTOR4	Communalities
Gym	-0.17459	0.63170	0.02663	0.20566	.472531
Movies	0.04293	0.73488	-0.04038	0.08986	.551600
Eating	0.00357	-0.04312	0.95543	0.10327	.925379
Weather decks	0.14444	0.10755	0.23194	0.22958	.138935
Lounges	0.24523	0.25533	0.15621	0.05375	.152621
Reading	0.93103	-0.17736	0.13797	0.06470	.921502
Time alone	0.39105	0.07789	0.45977	-0.01331	.370554
Library	0.50390	0.01554	0.00902	0.34822	.375493
With friend	0.37449	0.34556	0.09534	0.07596	.274512
Reading mail	0.11194	0.37448	0.10413	0.49846	.412075
Writing mail	0.08844	0.12009	0.04146	0.84058	.730545
Variance explained by each factor	1.547591	1.329545	1.245539	1.203072	

Final Communality Estimate: Total = 5.325747

in the view of women on board the Comfort.

Clearly, between men and women relevant factors underlying responses to the stress reducers are different; the factors which emerged are not alike nor do they account for comparable amounts of the common variance. Therefore, we concluded that just because men and women are doing the same things one cannot assume that the same psychosocial, stress-reducing mechanism is operating. Therefore, we do not include factor analysis for the total group.

In addition, the factor structure within sexes is not stable, like it was with the stressors, as further analyses not reported here indicate. Therefore, in the section on MANOVA and least square means we use all the stress reducers as outcome measures; we do not group them into subscales as we can with the stressors.

D. Sex and Occupation Effects

D.1. Manova

Because sex and occupation were so intimately intertwined, with the majority of nurses of nurses being women and the majority of corpsmen being men, we decided to examine the effects of sex, occupation and their interaction on time 1 stressors, coping devices and mood states. This was done first looking at nurses versus all other respondents and then for nurses versus corpsmen only with the responses of all others treated as missing values. Manova's were done on conceptual sets of responses i.e. on stressors or on coping devices as a group of dependent variables.

D.1.a.: Nurses versus all others

Comfort-specific stressors

As was previously mentioned the original nine-item scale dealing with perception of Comfort-specific stressors was reduced to two items and two factors: heat stress, separation from family stress, a factor dealing with injury and another dealing with trauma-related work demands. Data were assessed using Wilks' lambda. Sex, occupation and the sex-by-occupation were entered into the model at the same time.

We first present the results of the MANOVAs and later the least square means comparisons.

There was a significant interaction of sex-by-occupation in predicting stressor perceptions (Wilks' Lambda = .9497, $F[4,222]=2.9384$, $p=.0214$). In addition, there was also a significant main effect for sex in predicting these effects (Wilks' Lambda = .8743, $F[4,22]=7.9782$, $p=.0001$) while the effect of occupation only approached statistical significance (Wilks' Lambda = .9635, $F[4,222]=2.1040$, $p=.0813$).

It should be noted that we mention main effects even though the interaction is significant for completeness sake. Many regard attending to significant main effects when a significant interaction has been found to be a controversial area (Jaccard, Turrisi, & Wan, 1990)

Comfort-specific stress reducers

Subscale scores derived from factor analysis cannot be used in these analyses because the subscales are different for men and women, so, individual variables will be utilized as the outcomes in the Manova model statement.

Neither the sex-by-occupation interaction (Wilks' Lambda=.9315, $F[11,167]=1.1169$, $p=.3510$) nor the sex main effect (Wilks' Lambda=.9103, $F[11,167]=1.4967$, $p=.1368$) were statistically significant. There was, however, a significant main effect for occupation (Wilks' Lambda=.8703, $F[11,167]=2.2631$, $p=.0135$).

Stress of deployment as experienced by the social field

Another block of outcome measures focused on a rating of the stress of deployment as experienced by the respondents, their "significant others", children, supervisors and coworkers.

There was no significant sex-by-occupation effect (Wilks' Lambda = .9718, $F[5,212] = 1.2302$, $p=.2960$). However, there were significant main effects for both occupation (Wilks' Lambda=.9290, $F[5,212]=3.2409$, $p=.0077$) and for sex (Wilks' Lambda = .9094, $F[5,212]=4.2203$, $p=.0011$).

Mood Measures:the SCL-90

A subset of the SCL-90 subscales were used as independent variables for this set of analyses. These subscales focused on depression, anxiety, somatization and hostility.

There was neither a significant sex-by-occupation interaction (Wilks' Lambda = .9873, $F[4,209]=.6707$, $p=.6130$) nor a significant occupation main effect (Wilks' Lambda= .9816, $F[4,209]=.9784$, $p=.4203$). However sex did predict SCL-90 subscale scores (Wilks' Lambda = .9529, $F[4,209]=2.5831$, $p=.0382$).

Coping Devices: Perceived Social Support

Respondents were also asked to rate perceived social support from respondents and from friends. There was no significant sex-by-occupation effect (Wilks' Lambda=.9759, $F[2,158]=.9759$, $p=.1460$). Nor was there a

significant main effect for sex (Wilks' Lambda=.9892, $F[2,158]=.8587$, $p=.4257$). There was a statistically significant effect for occupation (Wilks' Lambda=.9202, $F[2,158]=6.8555$, $p=.0014$).

Coping Devices: Ways of Coping

The reader will remember that the Ways of Coping measure covers a variety of coping styles: confrontive, distancing, self-controlling, seeking social support, accepting responsibility, escape avoidance, planful problem solving and, finally, positive reappraisal.

There were no significant sex-by-occupation effects in predicting these outcome measures (Wilks' Lambda = .8147, $F[8,187]=.5536$, $p=.8147$). Nonetheless, the sex main effect very closely approaches statistical significance (Wilks' Lambda = .9260, $F[8,187]=1.8686$, $p=.0672$) while occupation is not significant (Wilks' Lambda=.9392, $F[8,187]=1.5141$, $p=.15647$).

D.1.b.: Nurses versus Corpsmen

As mentioned earlier, similar tests were done limited the study respondents to nurses and hospital corpsmen. All analyses were done in the same way as in Part 1.

Comfort-specific Stressors

The interaction of sex-by-occupation was statistically significant in predicting responses to the Comfort-specific stressors (Wilks' Lambda= .9481, $F[4,181]=2.4784$, $p=.0457$).

This was also true for both main effects of sex (Wilks' Lambda= .8655, $F[4,181]=7.0334$, $p=.0001$) and occupation (Wilks' Lambda= .9373, $F[4,181]=3.0254$, $p=.0191$).

Comfort-specific stress reducers

In comparing the responses of nurses and corpsman, there was no significant sex-by-occupation interaction in predicting this set of variables (Wilks' Lambda=.9492, $F[11,134]=.6526$, $p=.7806$).

Nonetheless, sex and occupation are significant independent variables (for sex, Wilks' Lambda=.8541, $F[11,134]=2.0813$, $p=.0257$ and for occupation, Wilks' Lambda=.8250, $F[11,134]=2.5832$, $p=.0053$).

Stress of Deployment as Experienced by the Social Field

When considering perceived stress experienced by the self and others in the individual's social field as an outcome, there was no significant sex-by-occupation interaction (Wilks' Lambda= .9684, $F[5,173]=1.1288$, $p=.3469$) in anticipating it. There were, nonetheless, significant main effects for sex (Wilks' Lambda= .9266, $F[5,173]=2.7401$, $p=.0207$) and for occupation (Wilks' Lambda=.9199, $F[5,173]=3.0098$, $p=.0124$).

Mood Measures: the SCL-90

There was no significant sex-by-occupation interaction in forecasting this set of independent variables (Wilks' Lambda=.9823, $F[4,170]=.7679$, $p=.5475$). Main effects approach significance (for sex, Wilks' Lambda=.9538, $F[4,170]=2.0588$, $p=.0884$ and for occupation, Wilks' Lambda=.9549, $F[4,170]=2.0053$, $p=.0959$).

Coping Devices: Perceived Social Support

A significant effect for occupation (Wilks' Lambda=.8856, $F[2,124]=8.0064$, $p=.0005$) exists but not for sex (Wilks' Lambda=.9828, $F[2,124]$, $p=.3420$). The sex-by-occupation interaction approaches significance (Wilks' Lambda=.9622, $F[2,124]=2.4332$, $p=.0919$).

Coping Devices: Ways of Coping

Only the occupation main effect was significant with this set of predictors (Wilks' Lambda=.8812, $F[8,150]=2.5287$, $p=.0131$). Both the interaction term (Wilks' Lambda=.9802, $F[8,150]=.9802$, $F[8,150]=.3792$, $p=.9303$) and the sex main effect (Wilks' Lambda=.9118, $F[8,150]=.3056$, $p=1.000$) were not.

D.2. Least Square Means

[Note: these are presented along with actual mean values in Appendix B, Tables B.95-B101.]

We now turn to a consideration of pairs of significant effects by sex, occupation or by sex within occupation. We examine only those comparisons where Manova has shown the effect to be significant for a particular group of variables. A summary of significant Manova's is shown in Table 7. Significance is assessed by t-tests on the least square means.

D.2.a.: Nurses versus all others

Stressors

The sex main effect and the sex-by-occupation interaction are significant. Specifically, women have significantly higher scores on the mean fear of injury factor ($t=-2.7018$, $p=.0074$); women are also significantly higher on the mean fear of 'trauma-related work demands factor as well ($t=-4.8799$, $p=.0001$). There were no statistically significant sex differences on ratings of the heat stress ($t=-.15578$, $p=.8748$) or the separation from family variables ($t=.7854$, $p=.4330$).

With respect to significant interactions, women non-nurses are

Table 7: Summary of p-values for Manovas using sex, occupation and sex-by-occupation effects in predicting various sets of outcomes for nurses versus all other respondents and for nurses versus hospital corpsmen. Comfort Study, time 1.

<u>Concept</u>	<u>Effect</u>	<u>Respondent Group</u>	
		Nurses v others	Nurses v corpsmen
Stressors	sex	*	*
	occupation	ns	*
	interaction	*	*
Stress reducers	sex	ns	*
	occupation	*	*
	interaction	ns	ns
Social field stress	sex	*	*
	occupation	*	*
	interaction	ns	ns
SCL-90 mood	sex	*	ns
	occupation	ns	ns
	interaction	ns	ns
Perceived social support	sex	ns	ns
	occupation	*	*
	interaction	ns	ns
Ways of Coping	sex	ns	ns
	occupation	ns	*
	interaction	ns	ns

* p <.05

ns=not significant

significantly higher on injury stress ($t = -3.5442$, $p = .0005$) and on trauma-related work demands stress ($t = 2.5151$, $p = .0126$) than men non-nurses and also than male nurses (for injury stress, $t = 2.1694$, $p = .0311$; for work-demands stress, $t = .3.1704$, $p = .0017$)

Moreover, women nurses rate themselves most highly - of any other group - on work demands stress -- higher than their male nurse colleagues ($t = 4.1838$, $p = .0001$) and their non-nurse male shipmates ($t = 4.5860$, $p = .0001$).

There were no significant interaction effects for heat stress or for separation from family stress.

Stress Reducers

There were significant occupational effects regarding the Comfort-specific stress reducers. Nurses rated eating and reading mail as being more helpful than non-nurses. ($t = -2.5949$, $p = .0103$ and $t = -2.4764$, $p = .0142$, respectively).

Social Field Stress

Women reported themselves as experiencing more stress to the news of deployment ($t = -2.9761$, $p = .0033$); they also noted that their children were significantly more stressed than did men respondents ($t = -2.5897$, $p = .0103$).

Nurses recalled significantly more stress felt by supervisors ($t = 3.7157$, $p = .0003$) and coworkers ($t = -3.2437$, $p = .0014$) to the news of their deployment than did all other respondents.

SCL-90 Mood

Despite the fact that Manova reveals a significant sex effect, least square means t-tests show two effects which

only approach statistical significance: depression and anxiety.

Women showed more depression ($t=-1.7328$, $p=.0846$) and more anxiety ($t=-1.8440$, $p=.0666$) than men.

Perceived Social Support

Nurses reported significantly more social support from friends than did all other respondents ($t=-3.5554$, $p=.0005$).

Ways of Coping

Manova revealed no significant effects for sex, occupation or sex-by-occupation interaction.

D.2.b.: Nurses versus corpsmen

[Note: The actual least square means along with the t-tests are shown in Appendix B, Tables B.102-B.107]

Stressors

Women reported significant higher stress levels on the injury factor ($t=-2.6864$, $p=.0079$) and on the trauma-related work demands factor ($t=-4.7466$, $p=.0001$). Nurses related more significantly more separation from family stress than did corpsmen ($t=-2.2457$, $p=.0259$).

There was also a significant sex-by-occupation effect in predicting responses to stressors. With regard to fear of injury stress --which the reader will remember is composed of items dealing with fear of fire, terrorists, the ship's sinking and fear of dying -- female corpsmen reported the highest stress ratings of any sex-by-occupation group when occupation is limited to nurses and corpsmen. They are significantly higher than male corpsmen ($t=3.1392$, $p=.0020$); than male nurses ($t=2.3604$, $p=.0193$); and than female nurses ($t=-2.1921$, $p=.0296$).

On the other hand, female nurses related the highest stress responses to the trauma-related work demands factor, composed of questions dealing with combat casualties, the unknown and the death of others. They scored significantly higher than male corpsmen ($t=4.1439$, $p=.0001$) and male nurses ($t=4.1728$, $p=.0001$) but not in comparison to female corpsmen ($t=.4807$, $p=.6313$). Female corpsmen also scored significantly higher than their male occupational counterparts ($t=2.3843$, $p=.0181$) and male nurses ($t=3.2707$, $p=.0013$).

With regard to separation from family, female nurses scored higher than male corpsmen ($t=2.1046$, $p=.0367$) in their ratings of this stressor.

Stress Reducers

After limiting the sample to just nurses and corpsmen, men, relative to women, rated going to the movies ($t=2.3775$, $p=.0187$) and reading mail ($t=2.4445$, $p=.0157$) as significantly more helpful. Nurses, relative to corpsmen, rated eating ($t=-3.1974$, $p=.0017$) and reading mail ($t=2.4445$, $p=.0157$) as significantly more helpful.

Social Field Stress

Women reported that they experienced significantly more stress to the news of deployment than did men ($t=-2.4967$, $p=.0135$). Nurses noted that they experienced more stress at this time ($t=-2.0555$, $p=.0413$) than did corpsmen. In addition, nurses related more stress experienced by supervisors ($t=-3.5171$, $p=.0006$) and by their coworkers ($t=-2.8820$, $p=.0044$).

SCL-90 Mood

Using Manova, there were no significant sex, occupation, or sex-by-occupation effects.

Perceived Social Support

Nurses related significantly more social support from friends than did corpsmen ($t=-3.9778$, $p=.0001$).

Ways of Coping

Corpsmen related more confrontive coping ($t=2.4706$, $p=.0146$), more distancing ($t=2.0678$, $p=.0403$) and more escape avoidance ($t=2.4879$, $p=.0139$) than did nurses.

E. Sex and Age Effects

E.1. Manova

Analyses similar to those done for sex and occupation were done for sex and age. Age was dichotomized into younger (between 18 and 25) and older (between 26 and 55) based on the median age of 26.

Stressors

There were significant main effects for sex (Wilks' Lambda = .8549, $F[4,229]=9.7137$, $p=.0001$) and for age (Wilks' Lambda = .9229, $F[4,229]=4.7784$, $p=.0010$), but there was no significant age-by-sex interaction (Wilks' Lambda = .9800, $F[4,229]=1.1660$, $p=.3266$).

Stress Reducers

Sex was a significant main effect (Wilks' Lambda = .8443, $F[11,175]=2.9331$, $p=.0014$); nonetheless, the age effect and the age-by-sex interaction were not (for age, Wilks' Lambda = .9164, $F[11,175]=1.4501$, $p=.1545$; for the interaction, Wilks' Lambda =

.9440, $F[11,175]=.9439$, $p=.4998$).

Social Field Stress

Sex and age were significant main effects (for sex, Wilks' $\Lambda=.7869$, $F[5,218]=11.8101$, $p=.0001$; for age, Wilks' $\Lambda=.9012$, $F[5,218]=4.7765$, $p=.0004$). However, there was no significant age-by-sex interaction (Wilks' $\Lambda=.9654$, $F[5,218]=.15621$, $p=.1720$).

SCL-90 Mood

Once again, sex (Wilks' $\Lambda=.9012$, $F[4,215]=5.8916$, $p=.0002$) and age (Wilks' $\Lambda=.8885$, $F[4,215]=6.7486$, $p=.0001$) predicted significant main effects. The sex-by-age interaction did not (Wilks' $\Lambda=.9706$, $F[4,215]=1.6269$, $p=.1686$).

Perceived Social Support

There was no significant main effect for age (Wilks' $\Lambda=.9964$, $F[2,162]=.2887$, $p=.7496$) or for the age-by-sex interaction (Wilks' $\Lambda=.9874$, $F[2,162]=1.0332$, $p=.3582$). Nonetheless, sex produced a significant main effect (Wilks' $\Lambda=.8983$, $F[2,162]=9.1661$, $p=.0002$).

Ways of Coping

For the fourth time, sex and age predicted significant main effects (for sex, Wilks' $\Lambda=.8497$, $F[8,191]=4.2218$, $p=.0001$; for age, Wilks' $\Lambda=.8860$, $F[8,191]=3.0722$, $p=.0028$). And the sex-by-age interaction was not significant (Wilks' $\Lambda=.9263$, $F[38,161]=.3372$, $p=.9999$).

E.2. Least Square Means

{See Appendix B, Tables B.108-B.113 for actual means along with

t-tests]

As with sex and occupation, comparisons between pairs of means were next examined for those effects found significant by Manova. Least square means was used. Table 8 summarizes the effects tested by Manova by each set of outcome variables.

Stressors

Women related more fear of injury stress ($t=-3.3654$, $p=.0009$) and more trauma-related work demands stress ($t=-6.0121$, $p=.0001$). However, the older group reported less trauma-related work demand stress ($t=3.2632$, $p=.0013$), but more heat stress ($t=-2.2179$, $p=.0275$).

Stress Reducers

Men reported that movies were more helpful in reducing stress than women ($t=3.3924$, $p=.0008$); however, women found the weather decks more beneficial ($t=-2.5839$, $p=.0105$).

Social Field Stress

During the week of deployment, women experienced significantly more stress themselves than did men ($t=-4.9289$, $p=.0001$). They also noted significantly more stress in their children ($t=-3.7499$, $p=.0002$); in their supervisors ($t=-3.6205$, $p=.0004$) and in their coworkers ($t=-3.2113$, $p=.0015$) than did men.

Younger respondents reported significantly more stress in their children than did older ones ($t=4.4727$, $p=.0001$).

SCL-90 Mood

Women related significantly more depression and anxiety than did men (for depression, $t=-2.6240$, $p=.0093$; for anxiety, $t=-2.8711$,

Table 8: Summary of p-values for Manovas using sex, age and sex-by-age effects in predicting various sets of outcomes for all respondents. Comfort Study, time 1.

<u>Concept</u>	<u>Effect</u>	<u>Significance</u>
Stressors	sex	*
	age	*
	interaction	ns
Stress reducers	sex	*
	age	ns
	interaction	ns
Social field stress	sex	*
	age	*
	interaction	ns
SCL-90 mood	sex	*
	age	*
	interaction	ns
Perceived social support	sex	*
	age	ns
	interaction	ns
Ways of Coping	sex	*
	age	*
	interaction	ns

* p <.05

ns=not significant

p=.0045).

The younger somatized more ($t=3.8040$, $p=.0002$). They were also more depressed ($t=3.9910$, $p=.0001$); more anxious ($t=3.5630$, $p=.0005$) and more hostile ($t=5.0694$, $p=.0001$).

Perceived Social Support

Women noted significantly more social support from friends than did their male counterparts ($t=-3.6865$, $p=.0003$).

Ways of Coping

Men reported more confrontive coping ($t=2.2812$, $p=.0236$), more acceptance of responsibility ($t=2.5066$, $t=.0130$) and more planful problem solving ($t=1.9626$, $p=.0511$) than did women.

Younger respondents described more confrontive coping ($t=2.5264$, $p=.0123$), more seeking social support ($t=2.0355$, $p=.0431$) and more escape avoidance ($t=3.6177$, $p=.0004$).

IV. DISCUSSION

Concerns of Comfort hospital personnel seemed to focus on two areas: their life situations on board ship and their worries about the folks back home.

Part 1. Life on Board Ship

Previous researchers have described the stresses of hospital personnel, namely nurses, as involving danger and the severity of patient casualties (Baker, Menard & Johns, 1989; Stretch, Vail & Maloney, 1985). This is true even if they viewed their service in a war zone as having a positive impact on their lives or if they indicated that they would have gone to Vietnam again (Baker, Menard & Johns, 1989).

These factors of concern over personal safety and treatment of combat casualties are exactly those that we found among both men and women on a hospital ship. We have documented, however, that women or some occupational subgroup of women report higher levels of stress on one or both of these factors than men.

Women report more fear of trauma-related work demands. This is particularly true of women nurses who rate themselves in the moderately stressful range on the work demands factor.

Women non-nurses are particularly high on fear of injury, i.e. fear of fire, terrorists, the ships' sinking and fear of dying, than any other sex-occupational group.

These effects are still evident when the comparisons are limited to nurses and corpsmen. In fact, women corpsmen are also high on trauma-related work demands stress.

Nurses in other studies have rated themselves as highly stressed by work demands especially regarding issues related to dying. These studies have also shown other work factors such as non-trauma work demands, job control including control over one's work pace, physical environment and the availability of supplies (Haynes, 1991) and supervisory/coworker support (Constable & Russell, 1986) to be important. An examination of many of these factors was beyond the scope of this study but may be important for future research.

Perceived stress may also be a function of the type of unit in which the nurse works (Caldwell & Weiner, 1981) and whether the nurse is in a supervisory role (Caldwell & Weiner, 1981). We have no information on the effects of these factors at this time. Sample size is probably too small to do a meaningful analysis on these factors.

We do know that there were no statistically significant differences between the sexes in the amount of support received from coworkers and supervisors during the week the survey was completed.

Nonetheless, we do not know how the same group of military nurses rate these non-war zone factors during their shore duty work and how these expectations change during deployment in the same group. Anecdotal evidence indicates that there is a sense of "making do" during war zone service (McCarthy, 1995) and that, perhaps, there should be training in making do at least in regard to such things as the availability of supplies. This has certainly been one reason for physicians' study of military medical history.

Nurses reported more support from their friends than did any other group. Whether friends were coworkers is not known. Given that

respondents lived and worked in the same place, i.e. the ship, we don't know if such distinctions are even important or for what issues they may be most salient.

Given that social support has been shown to have such salubrious effects and given that women corpsmen report high trauma-related work demands it may be necessary to augment the social support networks of women corpsmen. It is also unknown the extent to which women corpsmen feel supported by their male corpsmen counterparts is also unknown.

Another issue in this regard is important. One study has reported that military nurses, relative to a group of civilian ones, report less support from their supervisors and less coworker cohesion (Robinson et al, 1993). If the military continues its current practice of deploying reservists and national guardsmen, it may be important to keep this in mind if these reservists are ever integrated in with the "regulars." The expectations of the former civilian nurses may be different. In general it is useful practice to facilitate the development of social networks for all groups.

This is further shown in the emotional responses during deployment. When occupation was controlled, women showed more depression and anxiety than men in effects which approached statistical significance. When age was controlled these effects found reached statistical significance.

Moreover, after sex was considered in the equation the younger (18-25 year olds) respondents somatized more; they were also more depressed, more anxious and more hostile.

The young showed higher levels of confrontive coping, seeking

social support and escape avoidance. The first two are problem solving modes of coping and the third is emotion focused. Because this was a seven-month project, we cannot say at this time which coping style was associated with what emotional response.

Being older made respondents less prone to work demands stress. It is not known whether being older exempts one from work demands and puts one in an administrative position on board a hospital ship. If this is so, of course, this would mean one has less anticipated exposure to trauma; however, as we indicated earlier, being a nursing supervisor has its own stresses with the nurse frequently being caught between administration and nursing personnel.

With age factored in, men report more confrontive coping, acceptance of responsibility and planful problem solving than women. Again, this is a mix of problem and emotion focused coping. Given women's greater propensities to depression and anxiety this suggests that these types of coping, among other things, may be what keeps men from getting depressed or anxious. Time and money limitations keep us from pursuing further analyses which would clarify these relationships.

Turning to some of the bivariate analyses we note that there were no differences between the sexes in the amount of sleep reported. Over 70% fell in the range of six to nine hours. This was the case despite the fact that insomnia is associated with depression (Ford & Kamerow, 1989) and that women reported being more depressed than men. In the NIMH ECA longitudinal studies women do have higher prevalent insomnia than men (Ford & Kamerow, 1989) and, if that insomnia did not

resolve itself by the second visit one year later, it was associated with a greater likelihood of major depression. Perhaps the depression felt by Comfort respondents truly resolved itself or perhaps the feeling of fatigue is more important. In fact, women on the Comfort reported greater feelings of fatigue. This is an area for further investigation.

Despite these higher levels of depression among women as a group, they did not report seeking more health care for emotional problems than men. Only 10% of the women and 5% of the men reported doing so; this difference was not statistically significant.

Women did, however, report seeking more medical care for physical problems than did men. We cannot at this time say whether these women were more depressed. However, primary care physicians should be alerted to this possibility. If depressed women are not entering the medical care system to any significant degree, this provides further need for the development of social support networks on a ship-wide basis.

Part 2: The Folks Back Home

Children left behind during a deployment continue to be of concern to deployed men and women and to the military services.

Separation from family was rated as one of the most stressful experiences by both sexes. Moreover, younger respondents and women reported that their children were more stressed by the news of deployment than older respondents or men. Nurses also experienced more stress themselves to the news of deployment and they later indicated that reading mail was a great stress reducer. It is interesting to speculate that some of the stress of the news of deployment involved

leaving family members and that mail allayed some of these worries.

This raises a number of interesting questions for which we have no data. What type of child care arrangements do older service members make so that there is less worry for them? Does it involve the presumed older ages of the children and less impact of parental separation or does it concern actual child care arrangements?

Grandparents have been considered to be a source of numerous types of help to parents: financial aid, information, and emotional support (Tinsley & Parke, 1987). Do older service members utilize the help of grandparents during deployment while younger ones do not? Is this because older service members have resolved their own parental conflicts to some extent? If so, can something be done to foster a resolution of these conflicts?

However, other factors may be at work. Pearson et al. (1990) write, "Whether entrance to grandparenthood was early or on time has also been found to affect grandmothers reactions [to resuming any parenting role with regard to grandchildren] with early grandmothers experiencing more role overload (responsibilities of their own minor children, other family member care, employment) compared to their on-time counterparts" (p.440).

Moreover, there is some evidence that in parenting the two party system works best. Both in a representative national sample (Dornbusch et al, 1985) and in an inner city cohort (Ensminger, Kellam & Rubin, 1983), mother-alone families were associated with a greater incidence of truant behavior in children. In the inner city cohort, mother-stepfather families also fared poorly. The two-party system may not necessarily be

limited to the traditional mother-father combinations (Ensminger, Kellam & Rubin, 1983).

Furthermore, there may be cultural constraints and facilitations. White middle class families may feel expectations from their families to go out and be nuclear while African-American families may tend to be extended (Pearson et al, 1990). Pearson et al. (1990) also note that grandparent involvement may vary by social class, age, ethnic group, family structure and cohort.

These studies have dealt with civilian populations. If we pursue this we know little about the expectations of parents regarding their adult children who have entered military service. This may also influence family dynamics.

Further research is needed in this area using a sample of sufficient size to accomodate the diversity of responses to the problem. Investigators in this study only had access to one hospital ship because they knew one of the psychiatrists on board.

We also recommend that further studies using surveys consider supplementing the findings with intense structured interviews of key informants from several groups of interest on board ship. This should be done immediately after their tour on board is over in order to elucidate many of these relationships.

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VI. APPENDIX A: THE COMFORT SURVEY - TIME 1

USNS COMFORT QUESTIONNAIRE

Please return to:

Robert J. Ursano, M.D.
Col, USAF, MC, FS (Ret)
Department of Psychiatry
Uniformed Services University of the Health Sciences
4301 Jones Bridge Road
Bethesda, Maryland 20814-4799

VOLUNTEER AGREEMENT

1. NATURE OF THE STUDY. The purpose of this research is to assess the psychological and behavioral responses to traumatic events over time.

2. BENEFIT OF THE STUDY. You will have no direct benefit from this study. Information gathered in this study will help determine positive and negative consequences of traumatic events over time to help minimize psychosocial disruption in military units and communities experiencing such events.

3. RISKS, INCONVENIENCES, AND DISCOMFORTS. Taking these surveys involves no known risks, inconveniences or discomforts.

4. CONFIDENTIALITY OF RESEARCH RESULTS. All information about you and your answers obtained from this questionnaire will be treated as confidential information and protected by the Privacy Act Statement of 1974. This information will be available only to the staff of the Department of Psychiatry, Uniformed Services University of the Health Sciences.

5. SAFEGUARDS. Taking these surveys involves no known health risks which require safeguards. Results that are reported will be done in such a way that your answers given here cannot be associated with your name or any other identifying information.

6. ALTERNATIVES TO PARTICIPATION IN THIS STUDY. You have the right to withdraw consent to participate in this study at any time. If you decline to participate or leave the study, this will in no way count against you, and you will incur no loss of benefits to which you are entitled.

7. COST TO YOU FROM PARTICIPATING. The only cost to participating in this study is the time it takes to fill out the questionnaires.

8. VOLUNTEER STATEMENT. I hereby volunteer to participate in this research being conducted by the Department of Psychiatry, Uniformed Services University of the Health Sciences, Bethesda, Maryland. Should you have any question about this research project, contact: Robert J. Ursano, M.D., Col, USAF, MC, FS (Ret), Professor, Acting Chairman, Department of Psychiatry, USUHS, 4301 Jones Bridge Road, Bethesda, Maryland 20814-4799.

PARTICIPANT'S SIGNATURE DATE

ROBERT J. URSANO, M.D. DATE
(Principal Investigator's Signature)

MICHAEL DINNEEN, M.D. DATE
LCDR, MC, USN
(Principal Investigator's Signature)

CAROL S. FULLERTON, Ph.D. DATE
(Investigator's Signature)

USNS COMFORT QUESTIONNAIRE

INSTRUCTIONS

This survey is designed to provide information about your health at this time and your experience of the deployment of the USNS Comfort. The information from this survey will be used to better understand psychological and behavioral responses to deployment and traumatic events.

There are no right or wrong answers to the questions. Just answer the questions the way you feel about them. The important thing is **TO ANSWER ALL QUESTIONS COMPLETELY**. Most questions can be answered by circling a number corresponding to a ready-made answer or by writing in a brief description.

The information you provide will only be seen by the research team and staff. Your individual answers will be combined with those of the other participants for reporting results. You are requested to provide your full name in the appropriate place on the answer sheet.

**** You may wish to complete the survey at one time or you may find it helpful to complete the survey over the next two or three days, spending 15 minutes or so each day. We realize that there is a great deal of information contained in the survey. We appreciate your time and interest.**

PART I: BACKGROUND INFORMATION

Please answer the questions below by filling in the blanks or circling the number of the response that best applies.

- B 1. Name: _____
- B 2. Today's Date: (month/day/year) ____/____/____ (8-13)
- B 3. Rate/Rank: _____ Military Unit: _____ (14-17)
- B 4. Age: _____ years (18-19)
- B 5. Sex: (20)
1. Male
2. Female
- B 6. Marital status: (21)
1. Single (never married)
2. Single and living with a significant other
3. Married (only once)
4. Separated or divorced and not remarried
5. Divorced and remarried/divorced and living with a significant other
6. Other
- B 7. Do you have children? (22)
1. Yes; number of children: _____ (23-24)
2. No
- B 8. Occupation: 1. With your military unit _____ (25-26)
2. Other _____ (27-28)
- B 9. Highest level of education you have completed: (29)
1. Less than grade 12
2. High School
3. Some College
4. Bachelor's Degree
5. Master's Degree
6. Doctorate Degree (M.D., D.D.S. or Ph.D.)

B 10. Racial/Ethnic Background:

1. White
2. Black
3. Oriental
4. Hispanic
5. Other _____

(30)

B 11. **WORK ADDRESS:** _____
(prior to deployment) _____

HOME ADDRESS: _____

PART II: PRIOR EXPERIENCE

C 1. Duty station prior to deployment: _____ Describe duties below:

(31)

(32-34B)

C 2. Have you had **sea duty** prior to the USNS Comfort deployment?

1. Yes
2. No

(35)

If yes, what was the length of duty? _____ months

(36-37)

Please describe: _____

(38-39B)

C 3. Have you had **isolated duty** prior to the USNS Comfort deployment?

1. Yes
2. No

(40)

If yes, what was the length of duty? _____ months

(41-42)

Please describe: _____

(43-44B)

C 4. Have you had prior experience in the Middle East?

1. Yes
2. No

(45)

If yes, what was the length of duty? _____ months

(46-47)

Please describe: _____

(48-50B)

- C 5. Have you ever participated in a disaster or mass casualty event? (51)
1. Yes
 2. No
- If yes, describe where & when event(s) occurred & your participation: (52-54B)
-
- C 6. Have you ever worked with dead bodies? (55)
1. Yes
 2. No
- If yes, describe: (56-58B)
-
- C 7. Have you ever had a patient die while in your care? (59)
1. Yes
 2. No
- If yes, describe the event(s) and your reaction: (60-62B)
-
- C 8. Please indicate your participation in these Operational Readiness Training Experiences (*circle 1. Yes or 2. No for each item*)
- | | | | |
|---|--------|-------|------|
| 1. FMSS (Fleet Marine Force)..... | 1. Yes | 2. No | (63) |
| 2. ACLS | 1. Yes | 2. No | (64) |
| 3. ATLS | 1. Yes | 2. No | (65) |
| 4. C4..... | 1. Yes | 2. No | (66) |
| 5. Damage Control Training..... | 1. Yes | 2. No | (67) |
| 6. Shipboard Orientation..... | 1. Yes | 2. No | (68) |
| 7. MMART Team Experience..... | 1. Yes | 2. No | (69) |
| 8. RADMUF Training | 1. Yes | 2. No | (70) |
| 9. MEDSTAR (Trauma Surgery) Training..... | 1. Yes | 2. No | (71) |
| 10. IDT..... | 1. Yes | 2. No | (72) |
| 11. Other: _____ | 1. Yes | 2. No | (73) |
-
- C 9. Which kind of experience or training did you find most useful? Why? (74-76B)
- (77-82B)

PART III: PRESENT EXPERIENCE

- E 1. Date you arrived on the USNS Comfort: (month/day/year) ____ / ____ / ____ (83-88)

E 2. How did you first hear of the possible deployment of the USNS Comfort? (89-91B)

E 3. Describe your initial response to learning of your deployment: (92-94B)

E 4. Describe your first 3 days on the USNS Comfort (your feelings, activities, etc): (95-97B)

E 5. Where on the ship do you work?
 Division _____ Branch _____ Work Center _____ (98-103)

E 6. How many people do you bunk with? _____ people (104-105)

E 7. How helpful are the following leisure activities in reducing stress? (circle the number that best applies for each item below)

	1	2	3	4	5	6	7	8	
	NOT AT ALL HELPFUL		MODERATELY HELPFUL		EXTREMELY HELPFUL		NOT APPLICABLE		

- E 8. How stressful have the following items been to you on this deployment?
(circle the number that best applies for each item below)

	1	2	3	4	5	6	7	8		
	NOT AT ALL			MODERATELY		EXTREMELY		NOT		
	STRESSFUL			STRESSFUL		STRESSFUL		APPLICABLE		
				<i>Not at all</i>				<i>Extremely</i>	<i>Not</i>	
				<i>Stressful</i>				<i>Stressful</i>	<i>Applicable</i>	
1.	Heat.....	1	2	3	4	5	6	7	8	(118)
2.	Separation from Family	1	2	3	4	5	6	7	8	(119)
3.	Fear of Fire.....	1	2	3	4	5	6	7	8	(120)
4.	Fear of Terrorist Attack	1	2	3	4	5	6	7	8	(121)
5.	Fear of Ship Sinking.....	1	2	3	4	5	6	7	8	(122)
6.	Fear of Your Own Death.....	1	2	3	4	5	6	7	8	(123)
7.	Fear of the Death of Others	1	2	3	4	5	6	7	8	(124)
8.	Fear of Caring for Combat Casualties	1	2	3	4	5	6	7	8	(125)
9.	Fear of the Unknown	1	2	3	4	5	6	7	8	(126)
12.	Other:	1	2	3	4	5	6	7	8	(127)

- E 14. Compared to other groups in which you have worked, please rate your work group's **present morale**.

1 2 3 4 5 6 7

(144)

MUCH LOWER

AVERAGE

MUCH HIGHER

- E 15. Many people experience **stress and/or concern** during times of deployment. Using the scale provided, rate the degree of **STRESS** you believe each of the individuals listed below experienced during the **week you were deployed**.

1 2 3 4 5 6 7

8

NONE

MODERATE

A GREAT DEAL

**NOT
APPLICABLE**

A Great Deal

*Not
Applicable*

None

1. You, yourself.....	1	2	3	4	5	6	7	8	(145)
2. Your spouse/significant other	1	2	3	4	5	6	7	8	(146)
3. Your children	1	2	3	4	5	6	7	8	(147)
4. Your supervisors	1	2	3	4	5	6	7	8	(148)
5. Your coworkers	1	2	3	4	5	6	7	8	(149)

FOR THE WEEK YOU WERE DEPLOYED, please indicate the degree of support or lack of support--emotional or practical--you felt from each of the following individuals. Circle the number that best applies for each item.

VERY
UN-SUPPORTIVE
1

FAIRLY
UN-SUPPORTIVE
2

NEUTRAL
3

FAIRLY
SUPPORTIVE
4

VERY
SUPPORTIVE
5

Very
UN-Supportive

Very Supportive

*Not
Applicable*

E	16.	Family	1	2	3	4	5	6	(150)
E	17.	Friends	1	2	3	4	5	6	(151)
E	18.	Coworkers	1	2	3	4	5	6	(152)
E	19.	Supervisors	1	2	3	4	5	6	(153)

In the PAST WEEK, please note the degree of support or lack of support--emotional or practical--you have felt from each of the following individuals. Circle the number that best applies for each item.

VERY
UN-SUPPORTIVE
1 _____

FAIRLY
UN-SUPPORTIVE
2

NEUTRAL
3

FAIRLY
SUPPORTIVE
4

VERY
SUPPORTIVE
5

Very
UN-Supportive

Very Supportive

*Not
Applicable*

E	20.	Family	1	2	3	4	5	6	(154)
E	21.	Friends	1	2	3	4	5	6	(155)
E	22.	Coworkers	1	2	3	4	5	6	(156)
E	23.	Supervisors	1	2	3	4	5	6	(157)

E 24. Approximately how many hours of sleep did you average per day during the past week? _____ hours (158-159)

E 25. Have you obtained any medical care since coming onboard the USNS Comfort?

1. Annual physical..... 1. Yes 2. No (160)
2. For physical problem(s) 1. Yes 2. No (161)
3. For emotional or family problem(s)..... 1. Yes 2. No (162)
4. I have felt in need of medical care but have not obtained any..... 1. Yes 2. No (163)

If you answered yes to any above, please describe the nature of the problem:

(164-166B)

E 26. Have you gained or lost any weight since you were assigned to the USNS Comfort?

1. Yes, gained weight
2. Yes, lost weight
3. No, I weigh about the same (167)

E 27. Rate how fatigued you felt the **FIRST WEEK ON BOARD** the USNS Comfort.

1 2 3 4 5 6 7 (168)

NOT AT ALL
FATIGUED

SOMEWHAT
FATIGUED

EXTREMELY
FATIGUED

E 28. Rate how fatigued you felt **THIS PAST WEEK**.

1 2 3 4 5 6 7 (169)

NOT AT ALL
FATIGUED

SOMEWHAT
FATIGUED

EXTREMELY
FATIGUED

(170-172B)

HAR

Below are statements about life that people often feel differently about. Indicate how much you think each one is true in general by circling a number. Please give your own honest opinions.

NOT AT ALL TRUE 0 A LITTLE TRUE 1 QUITE TRUE 2 COMPLETELY TRUE 3

- | | | | | | | |
|---|--|---|---|---|---|-------|
| H | 1. Most of my life gets spent doing things that are worthwhile..... | 0 | 1 | 2 | 3 | (173) |
| H | 2. Planning ahead can help avoid most future problems | 0 | 1 | 2 | 3 | (174) |
| H | 3. No matter how hard I try, my efforts usually accomplish nothing..... | 0 | 1 | 2 | 3 | (175) |
| H | 4. I don't like to make changes in my everyday schedule..... | 0 | 1 | 2 | 3 | (176) |
| H | 5. The "tried and true" ways are always best..... | 0 | 1 | 2 | 3 | (177) |
| H | 6. Working hard doesn't matter, since only the bosses profit by it | 0 | 1 | 2 | 3 | (178) |
| H | 7. By working hard you can always achieve your goals..... | 0 | 1 | 2 | 3 | (179) |

		NOT AT ALL TRUE 0	A LITTLE TRUE 1	QUITE TRUE 2	COMPLETELY TRUE 3	
H	8.	Most of what happens in life is just meant to be.....	0	1	2	3 (180)
H	9.	When I make plans, I'm certain I can make them work.....	0	1	2	3 (181)
H	10.	It's exciting to learn something about myself.....	0	1	2	3 (182)
H	11.	I really look forward to my work.....	0	1	2	3 (183)
H	12.	If I'm working on a difficult task, I know when to seek help	0	1	2	3 (184)
H	13.	I won't answer a question until I'm really sure I understand it.....	0	1	2	3 (185)
H	14.	I like a lot of variety in my work.....	0	1	2	3 (186)
H	15.	Most of the time, people listen carefully to what I say.....	0	1	2	3 (187)
H	16.	Thinking of yourself as a free person just leads to frustration.....	0	1	2	3 (188)
H	17.	Trying your best at work really pays off	0	1	2	3 (189)
H	18.	My mistakes are usually very difficult to correct	0	1	2	3 (190)
H	19.	It bothers me when my daily routine gets interrupted.....	0	1	2	3 (191)
H	20.	Most good athletes and leaders are born, not made.....	0	1	2	3 (192)
H	21.	I often wake up eager to take up my life wherever it left off	0	1	2	3 (193)
H	22.	Lots of times, I don't really know my own mind	0	1	2	3 (194)
H	23.	I respect rules because they guide me	0	1	2	3 (195)
H	24.	I like it when things are uncertain or unpredictable	0	1	2	3 (196)
H	25.	I can't do much to prevent it if someone wants to harm me	0	1	2	3 (197)
H	26.	Changes in routine are interesting to me	0	1	2	3 (198)
H	27.	Most days, life is really interesting and exciting for me	0	1	2	3 (199)
H	28.	It's hard to imagine anyone getting excited about working	0	1	2	3 (200)
H	29.	What happens to me tomorrow depends on what I do today.....	0	1	2	3 (201)
H	30.	Ordinary work is just too boring to be worth doing	0	1	2	3 (202)

IRI

The following statements inquire about your thoughts and feelings in a variety of situations. Using the scale below, please circle the number to the right that indicates how well each item describes you.

		1	2	3	4	5	
	DOES NOT DESCRIBE ME WELL						DESCRIBES ME VERY WELL
R	1. I daydream and fantasize, with some regularity, about things that might happen to me.....	1	2	3	4	5	(203)
R	2. I often have tender, concerned feelings for people less fortunate than me	1	2	3	4	5	(204)
R	3. I sometimes find it difficult to see things from the "other guy's" point of view	1	2	3	4	5	(205)
R	4. Sometimes I don't feel very sorry for other people when they are having problems.....	1	2	3	4	5	(206)
R	5. I really get involved with the feelings of the characters in a novel.....	1	2	3	4	5	(207)
R	6. In emergency situations, I feel apprehensive and ill-at-ease.....	1	2	3	4	5	(208)

1 2 3 4 5

DOES NOT DESCRIBE
ME WELL

DESCRIBES ME
VERY WELL

R 7.	I am usually objective when I watch a movie or play, and I don't often get completely caught up in it.....	1	2	3	4	5	(209)
R 8.	I try to look at everybody's side of a disagreement before I make a decision.....	1	2	3	4	5	(210)
R 9.	When I see someone being taken advantage of, I feel kind of protective towards them.....	1	2	3	4	5	(211)
R 10.	I sometimes feel helpless when I am in the middle of a very emotional situation.....	1	2	3	4	5	(212)
R 11.	I sometimes try to understand my friends better by imagining how things look from their perspective.....	1	2	3	4	5	(213)
R 12.	Becoming extremely involved in a good book or movie is somewhat rare for me.....	1	2	3	4	5	(214)
R 13.	When I see someone get hurt, I tend to remain calm.....	1	2	3	4	5	(215)
R 14.	Other people's misfortunes do not usually disturb me a great deal.....	1	2	3	4	5	(216)
R 15.	If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.....	1	2	3	4	5	(217)
R 16.	After seeing a play or movie, I have felt as though I were one of the characters.....	1	2	3	4	5	(218)
R 17.	Being in tense emotional situations scares me.....	1	2	3	4	5	(219)
R 18.	When I see someone being treated unfairly, I sometimes don't feel very much pity for them.....	1	2	3	4	5	(220)
R 19.	I am usually pretty effective in dealing with emergencies.....	1	2	3	4	5	(221)
R 20.	I am often quite touched by things that I see happen.....	1	2	3	4	5	(222)
R 21.	I believe that there are two sides to every question and I try to look at them both.....	1	2	3	4	5	(223)
R 22.	I would describe myself as a pretty soft-hearted person.....	1	2	3	4	5	(224)
R 23.	When I watch a good movie, I can very easily put myself in the place of a leading character.....	1	2	3	4	5	(225)
R 24.	I tend to lose control during emergencies.....	1	2	3	4	5	(226)
R 25.	When I'm upset at someone, I usually try to "put myself in his shoes" for a while.....	1	2	3	4	5	(227)
R 26.	When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.....	1	2	3	4	5	(228)
R 27.	When I see someone who badly needs help in an emergency, I go to pieces.....	1	2	3	4	5	(229)
R 28.	Before criticizing somebody, I try to imagine how I would feel if I were in their place.....	1	2	3	4	5	(230)

PT

Read each statement and indicate whether it is **True** or **False** for you. **Circle: 1. True**
if the item describes you. **Circle: 2. False** if the item does not describe you.

P 1.	I have a good appetite.....	1. True	2. False	(231)
P 2.	I wake up fresh and rested most mornings.....	1. True	2. False	(232)

P 3.	My daily life is full of things that keep me interested.....	1. True	2. False	(233)
P 4.	Once in a while I think of things too bad to talk about.....	1. True	2. False	(234)
P 5.	I am sure I get a raw deal from life.....	1. True	2. False	(235)
P 6.	At times I have fits of laughing and crying that I cannot control.....	1. True	2. False	(236)
P 7.	No one seems to understand me.....	1. True	2. False	(237)
P 8.	I have nightmares every few nights.....	1. True	2. False	(238)
P 9.	I find it hard to keep my mind on a task or job.....	1. True	2. False	(239)
P 10.	I have very peculiar and strange experiences.....	1. True	2. False	(240)
P 11.	At times, I feel like smashing things.....	1. True	2. False	(241)
P 12.	Most any time I would rather sit and daydream than to do anything else.....	1. True	2. False	(242)
P 13.	My sleep is fitful and disturbed.....	1. True	2. False	(243)
P 14.	I am a good mixer.....	1. True	2. False	(244)
P 15.	I have not lived the right kind of life.....	1. True	2. False	(245)
P 16.	I wish I could be as happy as others seem to be.....	1. True	2. False	(246)
P 17.	I am troubled by discomfort in the pit of my stomach every few days or oftener.....	1. True	2. False	(247)
P 18.	Most of the time I feel blue.....	1. True	2. False	(248)
P 19.	I usually feel that life is worth while.....	1. True	2. False	(249)
P 20.	I do many things which I regret afterwards (I regret things more or more often that others seem to).....	1. True	2. False	(250)
P 21.	At times, I have the urge to do something harmful or shocking.....	1. True	2. False	(251)
P 22.	I don't seem to care what happens to me.....	1. True	2. False	(252)
P 23.	Most of the time I feel as if I have done something wrong or evil.....	1. True	2. False	(253)
P 24.	I am happy most of the time.....	1. True	2. False	(254)
P 25.	Often I feel as if there were a tight band about my head.....	1. True	2. False	(255)
P 26.	I believe that my home life is as pleasant as that of most people that I know.....	1. True	2. False	(256)
P 27.	Sometimes I feel as if I might injure either myself or someone else.....	1. True	2. False	(257)
P 28.	I have often lost out on things because I couldn't make up my mind soon enough.....	1. True	2. False	(258)
P 29.	Most nights I go to sleep without thoughts or ideas bothering me.....	1. True	2. False	(259)
P 30.	I have had periods in which I carried on activities without knowing later what I had been doing.....	1. True	2. False	(260)
P 31.	I am afraid of losing my mind.....	1. True	2. False	(261)
P 32.	I frequently find myself worrying about something.....	1. True	2. False	(262)
P 33.	I dream about things frequently which are best kept to myself.....	1. True	2. False	(263)
P 34.	I am never happier than when alone.....	1. True	2. False	(264)
P 35.	I am so touchy on some subjects that I can't talk about them.....	1. True	2. False	(265)
P 36.	Once in a while I think of things too bad to talk about.....	1. True	2. False	(266)
P 37.	I have had very peculiar and strange experiences.....	1. True	2. False	(267)
P 38.	At times I have fits of laughing and crying that I cannot control.....	1. True	2. False	(268)
P 39.	I easily become impatient with people.....	1. True	2. False	(269)
P 40.	I have certainly had more than my share of things to worry about.....	1. True	2. False	(270)
P 41.	Most of the time I wish I were dead.....	1. True	2. False	(271)
P 42.	I have strange and peculiar thoughts.....	1. True	2. False	(272)
P 43.	I hear strange things when I am alone.....	1. True	2. False	(273)

- P 44. Bad words, often terrible words, come into my mind and I cannot get rid of them 1. True 2. False (274)
- P 45. Sometimes some unimportant thought will run through my mind and bother me for days..... 1. True 2. False (275)
- P 46. Even when I am with people, I am lonely much of the time 1. True 2. False (276)
- P 47. I have sometimes felt that difficulties were piling up so high that I could not overcome them 1. True 2. False (277)
- P 48. It makes me feel like a failure when I hear of the success of someone I know well 1. True 2. False (278)
- P 49. Whenever possible I avoid being in a crowd 1. True 2. False (279)
- (280-282B)

PSS-FRIENDS

- Q 1. How many close friends do you have? (People you feel at ease with and can talk to about private matters and can call on for help).

_____ (number) (283-284)

The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with friends. For each statement, there are three possible answers: YES, NO, DON'T KNOW. Please circle the answer that best describes your experience.

- | | <u>YES</u> | <u>NO</u> | <u>DON'T KNOW</u> | |
|---|------------|-----------|-------------------|-------|
| O 1. My friends give me the moral support I need..... | 1. Yes | 2. No | 3. DK | (285) |
| O 2. Most other people are closer to their friends than I am..... | 1. Yes | 2. No | 3. DK | (286) |
| O 3. My friends enjoy hearing about what I think..... | 1. Yes | 2. No | 3. DK | (287) |
| O 4. Certain friends come to me when they have problems or need advice..... | 1. Yes | 2. No | 3. DK | (288) |
| O 5. I rely on my friends for emotional support..... | 1. Yes | 2. No | 3. DK | (289) |
| O 6. If I felt that one or more of my friends were upset with me, I'd just keep it to myself..... | 1. Yes | 2. No | 3. DK | (290) |
| O 7. I feel that I'm on the fringe in my circle of friends..... | 1. Yes | 2. No | 3. DK | (291) |
| O 8. There is a friend I could go to if I were just feeling down, without feeling funny about it later..... | 1. Yes | 2. No | 3. DK | (292) |
| O 9. My friends and I are very open about what we think about things..... | 1. Yes | 2. No | 3. DK | (293) |
| O 10. My friends are sensitive to my personal needs..... | 1. Yes | 2. No | 3. DK | (294) |
| O 11. My friends come to me for emotional support..... | 1. Yes | 2. No | 3. DK | (295) |
| O 12. My friends are good at helping me solve problems..... | 1. Yes | 2. No | 3. DK | (296) |
| O 13. I have a deep sharing relationship with a number of friends..... | 1. Yes | 2. No | 3. DK | (297) |
| O 14. My friends get good ideas from me about how to do things or make things..... | 1. Yes | 2. No | 3. DK | (298) |
| O 15. When I confide in friends, it makes me feel uncomfortable..... | 1. Yes | 2. No | 3. DK | (299) |
| O 16. My friends seek me out for companionship..... | 1. Yes | 2. No | 3. DK | (300) |
| O 17. I think that my friends feel that I'm good at helping them solve problems..... | 1. Yes | 2. No | 3. DK | (301) |
| O 18. I don't have a relationship with a friend that is as intimate as other people's relationships with friends..... | 1. Yes | 2. No | 3. DK | (302) |

- O 19. I've recently gotten a good idea about how to do something
from a friend 1. Yes 2. No 3. DK (303)
- O 20. I wish my friends were much different 1. Yes 2. No 3. DK (304)

PSS-SSO

The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with their spouse/significant other (S/SO). For each statement there are three possible answers: YES, NO, DON'T KNOW. Please circle the answer you choose for each item.

Do you have a spouse/significant other? (Circle number below)

1. Yes, I have a spouse/significant other. (305)
2. No, I do not have a spouse/significant other.

If Yes: Complete items below.

If No: Go to the next section on the next page.

		<u>YES</u>	<u>NO</u>	<u>DON'T KNOW</u>	
F	1. My spouse/significant other (S/SO) gives me the moral support I need	1. Yes	2. No	3. DK	(306)
F	2. I get good ideas about how to do things or make things from my spouse/significant other (S/SO)	1. Yes	2. No	3. DK	(307)
F	3. Most other people are closer to their S/SO than I am	1. Yes	2. No	3. DK	(308)
F	4. When I confide in my S/SO, I get the idea that it makes them uncomfortable.....	1. Yes	2. No	3. DK	(309)
F	5. My S/SO enjoys hearing about what I think.....	1. Yes	2. No	3. DK	(310)
F	6. My S/SO shares many of my interests.....	1. Yes	2. No	3. DK	(311)
F	7. My S/SO comes to me when s/he has problems or needs advice	1. Yes	2. No	3. DK	(312)
F	8. I rely on my S/SO for emotional support	1. Yes	2. No	3. DK	(313)
F	9. I could go to my S/SO if I were just feeling down, without feeling funny about it later	1. Yes	2. No	3. DK	(314)
F	10. My S/SO and I are very open about what we think about things	1. Yes	2. No	3. DK	(315)
F	11. My S/SO is sensitive to my personal needs	1. Yes	2. No	3. DK	(316)
F	12. My S/SO comes to me for emotional support	1. Yes	2. No	3. DK	(317)
F	13. My S/SO is good at helping me solve problems	1. Yes	2. No	3. DK	(318)
F	14. I have a deep sharing relationship with my S/SO	1. Yes	2. No	3. DK	(319)
F	15. My S/SO gets good ideas about how to do things or make things from me	1. Yes	2. No	3. DK	(320)
F	16. When I confide in my S/SO, it makes me feel uncomfortable	1. Yes	2. No	3. DK	(321)
F	17. My S/SO seeks me out for companionship	1. Yes	2. No	3. DK	(322)
F	18. I think that my S/SO feels that I'm good at helping her/him solve problems	1. Yes	2. No	3. DK	(323)
F	19. I don't have a relationship with my S/SO that is as close as other people's relationships with their S/SO	1. Yes	2. No	3. DK	(324)
F	20. I wish my S/SO were much different	1. Yes	2. No	3. DK	(325)
F	21. My S/SO takes care of me more than I take care of them	1. Yes	2. No	3. DK	(326)
F	22. I take care of my S/SO more than s/he take care of me.....	1. Yes	2. No	3. DK	(327)

Z

*Below are a number of statements which people have used to describe themselves.
Circle the appropriate number to indicate how you feel RIGHT NOW, that is, at this moment.*

	NONE OR A LITTLE OF THE TIME 1	SOME OF THE TIME 2	GOOD PART OF THE TIME 3	MOST OR ALL OF THE TIME 4	
Z 1.	I feel down-hearted and blue	1	2	3	4 (328)
Z 2.	Morning is when I feel the best	1	2	3	4 (329)
Z 3.	I have crying spells or feel like it	1	2	3	4 (330)
Z 4.	I have trouble sleeping at night	1	2	3	4 (331)
Z 5.	I eat as much as I used to	1	2	3	4 (332)
Z 6.	I still enjoy sex	1	2	3	4 (333)
Z 7.	I notice that I am losing weight	1	2	3	4 (334)
Z 8.	I have trouble with constipation	1	2	3	4 (335)
Z 9.	My heart beats faster than usual	1	2	3	4 (336)
Z 10.	I get tired for no reason	1	2	3	4 (337)
Z 11.	My mind is as clear as it used to be	1	2	3	4 (338)
Z 12.	I find it easy to do the things I used to	1	2	3	4 (339)
Z 13.	I am restless and can't keep still	1	2	3	4 (340)
Z 14.	I feel hopeful about the future	1	2	3	4 (341)
Z 15.	I am more irritable than usual	1	2	3	4 (342)
Z 16.	I find it easy to make decisions	1	2	3	4 (343)
Z 17.	I feel that I am useful and needed	1	2	3	4 (344)
Z 18.	My life is pretty full	1	2	3	4 (345)
Z 19.	I feel that others would be better off if I were dead	1	2	3	4 (346)
Z 20.	I still enjoy the things I used to do	1	2	3	4 (347)

WOC (R)

Please read each item below and indicate to what extent you felt or used each of the thoughts or behaviors described to deal with deployment.

	NOT USED 1	USED SOMEWHAT 2	USED QUITE A BIT 3	USED A GREAT DEAL 4	
W 1.	Just concentrated on what I had to do next-- the next step	1	2	3	4 (348)
W 2.	I tried to analyze the problem in order to understand it better	1	2	3	4 (349)
W 3.	Turned to work or substitute activity to take my mind off things	1	2	3	4 (350)
W 4.	I felt that time would make the difference-- only thing to do was wait	1	2	3	4 (351)
W 5.	Bargained or compromised to get something positive from situation	1	2	3	4 (352)
W 6.	I did something which I didn't think would work, but at least I was doing something	1	2	3	4 (353)
W 7.	Tried to get the person responsible to change his mind	1	2	3	4 (354)
W 8.	Talked to someone to find out more about the situation	1	2	3	4 (355)

		NOT USED 1	USED SOMEWHAT 2	USED QUITE A BIT 3	USED A GREAT DEAL 4	
W 9.	Criticized or lectured myself.....	1	2	3	4	(356)
W 10.	Tried not to burn my bridges, but leave things open somewhat	1	2	3	4	(357)
W 11.	Hoped a miracle would happen.....	1	2	3	4	(358)
W 12.	Went along with fate; sometimes I just have bad luck	1	2	3	4	(359)
W 13.	Went on as if nothing had happened	1	2	3	4	(360)
W 14.	I tried to keep my feelings to myself.....	1	2	3	4	(361)
W 15.	Looked for the silver lining,so to speak; tried to look on	1	2	3	4	(362)
	the bright side of things	1	2	3	4	(363)
W 16.	Slept more than usual.....	1	2	3	4	(364)
W 17.	I expressed anger to the person(s) who caused the problem.....	1	2	3	4	(365)
W 18.	Accepted sympathy and understanding from someone	1	2	3	4	(366)
W 19.	I told myself things that helped me to feel better	1	2	3	4	(367)
W 20.	I was inspired to do something creative	1	2	3	4	(368)
W 21.	Tried to forget the whole thing.....	1	2	3	4	(369)
W 22.	I got professional help	1	2	3	4	(370)
W 23.	Changed or grew as a person in a good way	1	2	3	4	(371)
W 24.	I waited to see what would happen before doing anything	1	2	3	4	(372)
W 25.	I apologized or did something to make up	1	2	3	4	(373)
W 26.	I made a plan of action and followed it	1	2	3	4	(374)
W 27.	I accepted the next best thing to what I wanted	1	2	3	4	(375)
W 28.	I let my feelings out somehow	1	2	3	4	(376)
W 29.	Realized I brought the problem on myself.....	1	2	3	4	(377)
W 30.	I came out of the experience better than when I went in.....	1	2	3	4	(378)
W 31.	Talked to someone who could do something concrete about the problem	1	2	3	4	(379)
W 32.	Got away from it for awhile; tried to rest or take vacation	1	2	3	4	(380)
W 33.	Tried to make myself feel better by eating, drinking, smoking	1	2	3	4	(381)
	using drugs or medication,etc	1	2	3	4	(382)
W 34.	Took a big chance or did something very risky	1	2	3	4	(383)
W 35.	I tried not to act too hastily or follow my first hunch	1	2	3	4	(384)
W 36.	Found new faith	1	2	3	4	(385)
W 37.	Maintained my pride and kept a stiff upper lip	1	2	3	4	(386)
W 38.	Rediscovered what is important in life	1	2	3	4	(387)
W 39.	Changed something so things would turn out all right.....	1	2	3	4	(388)
W 40.	Avoided being with people in general	1	2	3	4	(389)
W 41.	Didn't let it get to me; refused to think too much about it	1	2	3	4	(390)
W 42.	I asked a relative or friend I respect for advice.....	1	2	3	4	(391)
W 43.	Kept others from knowing how bad things were.....	1	2	3	4	(392)
W 44.	Made light of the situation; refused to get too serious about it.....	1	2	3	4	(393)
W 45.	Talked to someone about how I was feeling	1	2	3	4	(394)
W 46.	Stood my ground and fought for what I wanted.....	1	2	3	4	(395)
W 47.	Took it out on other people.....	1	2	3	4	(396)
W 48.	Drew on my past experiences; I was in a similar situation before.....	1	2	3	4	(397)
W 49.	I knew what had to be done	1	2	3	4	(398)
W 50.	Refused to believe that it had happened	1	2	3	4	(399)

	NOT USED 1	USED SOMEWHAT 2	USED QUITE A BIT 3	USED A GREAT DEAL 4	
W 51.					(398)
W 52.					(399)
W 53.					(400)
W 54.					(401)
W 55.					(402)
W 56.					(403)
W 57.					(404)
W 58.					(405)
W 59.					(406)
W 60.					(407)
W 61.					(408)
W 62.					(409)
W 63.					(410)
W 64.					(411)
W 65.					(412)
W 66.					(413)
W 67.					(414)

(415-417B)

MFQ

*Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is **True** or **False** as it pertains to you personally. Circle 1. True if the item describes you. Circle 2. False if the item does not describe you.*

U 1.	I could not remove the hook from a fish that was caught.....	1. True	2. False	(418)
U 2.	I would feel some revulsion looking at a preserved brain in a bottle.....	1. True	2. False	(419)
U 3.	If a badly injured person appears on TV, I turn my head away.....	1. True	2. False	(420)
U 4.	I dislike looking at pictures of accidents or injuries in magazines.....	1. True	2. False	(421)
U 5.	I do not mind visiting a hospital and seeing ill or injured persons.....	1. True	2. False	(422)
U 6.	Medical odors make me tense and uncomfortable.....	1. True	2. False	(423)
U 7.	I would not go hunting because I could not stand the sight of a dead animal.....	1. True	2. False	(424)
U 8.	Watching a butcher at work would make me anxious.....	1. True	2. False	(425)
U 9.	A career as a doctor or nurse is very attractive to me.....	1. True	2. False	(426)
U 10.	I would feel faint if I saw someone with a wound in the eye.....	1. True	2. False	(427)
U 11.	Watching people use sharp power tools makes me nervous.....	1. True	2. False	(428)
U 12.	The prospect of getting an injection or seeing someone else get one bothers me quite a bit.....	1. True	2. False	(429)
U 13.	I feel sick or faint at the sight of blood.....	1. True	2. False	(430)
U 14.	I enjoy reading articles about modern medical techniques.....	1. True	2. False	(431)
U 15.	Injuries, accidents, blood, etc., bother me more than anything else.....	1. True	2. False	(432)

U 16.	Under no circumstances would I accept an invitation to watch a surgical operation.....	1. True	2. False	(433)
U 17.	When I see an accident I feel tense.....	1. True	2. False	(434)
U 18.	It would not bother me to see a bad cut as long as it had been cleaned and stitched.....	1. True	2. False	(435)
U 19.	Using very sharp knives makes me nervous.....	1. True	2. False	(436)
U 20.	Not only do cuts and wounds upset me, but the sight of people with amputated limbs, large scars, or plastic surgery also bothers me.....	1. True	2. False	(437)
U 21.	If instruments were available, it would be interesting to see the action of the internal organs in a living body.....	1. True	2. False	(438)
U 22.	I am frightened at the idea of someone drawing a blood sample from me.....	1. True	2. False	(439)
U 23.	I don't believe anyone could help a person with a bloody wound without feeling at least a little upset.....	1. True	2. False	(440)
U 24.	I am terrified by the idea of having surgery.....	1. True	2. False	(441)
U 25.	I am frightened by the thought that I might some day have to help a person badly hurt in a car wreck.....	1. True	2. False	(442)
U 26.	I shudder when I think of accidentally cutting myself.....	1. True	2. False	(443)
U 27.	The sight of dried blood is repulsive.....	1. True	2. False	(444)
U 28.	Blood and gore upset me no more than the average person.....	1. True	2. False	(445)
U 29.	The sight of an open wound nauseates me.....	1. True	2. False	(446)
U 30.	I could never swab out a wound.....	1. True	2. False	(447)

SYM

Below is a list of problems & complaints that people sometimes have. Using the scale below, circle the number to the right that best describes how much discomfort that problem has caused you DURING THE PAST WEEK INCLUDING TODAY. Circle only one number for each problem and do not skip any items.

NOT AT ALL		A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY		
0		1	2	3	4		
S	1. Headaches.....	0	1	2	3	4	(448)
S	2. Nervousness or shakiness inside.....	0	1	2	3	4	(449)
S	3. Repeated unpleasant thoughts that won't leave your mind.....	0	1	2	3	4	(450)
S	4. Faintness or dizziness.....	0	1	2	3	4	(451)
S	5. Loss of sexual interest or pleasure.....	0	1	2	3	4	(452)
S	6. Feeling critical of others.....	0	1	2	3	4	(453)
S	7. The idea that someone else can control your thoughts.....	0	1	2	3	4	(454)
S	8. Feeling others are to blame for most of your troubles.....	0	1	2	3	4	(455)
S	9. Trouble remembering things.....	0	1	2	3	4	(456)
S	10. Worried about sloppiness or carelessness.....	0	1	2	3	4	(457)
S	11. Feeling easily annoyed or irritated.....	0	1	2	3	4	(458)
S	12. Pains in heart or chest.....	0	1	2	3	4	(459)
S	13. Feeling afraid in open spaces or streets.....	0	1	2	3	4	(460)
S	14. Feeling low in energy or slowed down.....	0	1	2	3	4	(461)
S	15. Thoughts of ending your life.....	0	1	2	3	4	(462)
S	16. Hearing voices that other people do not hear.....	0	1	2	3	4	(463)

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	
	0	1	2	3	4	
S 17.	Trembling.....0	1	2	3	4	(464)
S 18.	Feeling that most people cannot be trusted .....0	1	2	3	4	(465)
S 19.	Poor appetite.....0	1	2	3	4	(466)
S 20.	Crying easily .....0	1	2	3	4	(467)
S 21.	Feeling shy or uneasy with the opposite sex .....0	1	2	3	4	(468)
S 22.	Feelings of being trapped or caught .....0	1	2	3	4	(469)
S 23.	Suddenly scared for no reason .....0	1	2	3	4	(470)
S 24.	Temper outbursts that you could not control .....0	1	2	3	4	(471)
S 25.	Feeling afraid to go out of your house alone .....0	1	2	3	4	(472)
S 26.	Blaming yourself for things.....0	1	2	3	4	(473)
S 27.	Pains in lower back.....0	1	2	3	4	(474)
S 28.	Feeling blocked in getting things done .....0	1	2	3	4	(475)
S 29.	Feeling lonely .....0	1	2	3	4	(476)
S 30.	Feeling blue.....0	1	2	3	4	(477)
S 31.	Worrying too much about things .....0	1	2	3	4	(478)
S 32.	Feeling no interest in things .....0	1	2	3	4	(479)
S 33.	Feeling fearful .....0	1	2	3	4	(480)
S 34.	Your feelings being easily hurt.....0	1	2	3	4	(481)
S 35.	Other people being aware of your private thoughts.....0	1	2	3	4	(482)
S 36.	Feeling others do not understand you or are unsympathetic .....0	1	2	3	4	(483)
S 37.	Feeling that people are unfriendly or dislike you .....0	1	2	3	4	(484)
S 38.	Having to do things very slowly to insure correctness.....0	1	2	3	4	(485)
S 39.	Heart pounding or racing.....0	1	2	3	4	(486)
S 40.	Nausea or upset stomach.....0	1	2	3	4	(487)
S 41.	Feeling inferior to others .....0	1	2	3	4	(488)
S 42.	Soreness of your muscles .....0	1	2	3	4	(489)
S 43.	Feeling that you are watched or talked about by others.....0	1	2	3	4	(490)
S 44.	Trouble falling asleep .....0	1	2	3	4	(491)
S 45.	Having to check and double-check what you do .....0	1	2	3	4	(492)
S 46.	Difficulty making decisions.....0	1	2	3	4	(493)
S 47.	Feeling afraid to travel on buses, subways, or trains.....0	1	2	3	4	(494)
S 48.	Trouble getting your breath.....0	1	2	3	4	(495)
S 49.	Hot or cold spells.....0	1	2	3	4	(496)
S 50.	Having to avoid certain things, places, or activities because they frighten you .....0	1	2	3	4	(497)
S 51.	Your mind going blank.....0	1	2	3	4	(498)
S 52.	Numbness or tingling in parts of your body.....0	1	2	3	4	(499)
S 53.	A lump in your throat.....0	1	2	3	4	(500)
S 54.	Feeling hopeless about the future.....0	1	2	3	4	(501)
S 55.	Trouble concentrating .....0	1	2	3	4	(502)
S 56.	Feeling weak in parts of your body .....0	1	2	3	4	(503)
S 57.	Feeling tense or keyed up .....0	1	2	3	4	(504)
S 58.	Heavy feelings in your arms and legs .....0	1	2	3	4	(505)
S 59.	Thoughts of death or dying .....0	1	2	3	4	(506)
S 60.	Overeating .....0	1	2	3	4	(507)

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	
	0	1	2	3	4	
S 61.	Feeling uneasy when people are watching or talking about you	0	1	2	3	4 (508)
S 62.	Having thoughts that are not your own.....	0	1	2	3	4 (509)
S 63.	Having urges to beat, injure, or harm someone else	0	1	2	3	4 (510)
S 64.	Awakening in the early morning	0	1	2	3	4 (511)
S 65.	Having to repeat the same actions such as touching, counting, or washing	0	1	2	3	4 (512)
S 66.	Sleep that is restless or disturbed	0	1	2	3	4 (513)
S 67.	Having urges to break or smash things.....	0	1	2	3	4 (514)
S 68.	Having ideas or beliefs that others do not share	0	1	2	3	4 (515)
S 69.	Feeling very self-conscious with others.....	0	1	2	3	4 (516)
S 70.	Feeling uneasy in crowds, such as shopping or at a movie.....	0	1	2	3	4 (517)
S 71.	Feeling everything is an effort.....	0	1	2	3	4 (518)
S 72.	Spells of terror or panic	0	1	2	3	4 (519)
S 73.	Feeling uncomfortable about eating or drinking in public	0	1	2	3	4 (520)
S 74.	Getting into frequent arguments	0	1	2	3	4 (521)
S 75.	Feeling nervous when you are left alone	0	1	2	3	4 (522)
S 76.	Others not giving you proper credit for your achievements	0	1	2	3	4 (523)
S 77.	Feeling lonely even when you are with people.....	0	1	2	3	4 (524)
S 78.	Feeling so restless you couldn't sit still	0	1	2	3	4 (525)
S 79.	Feelings of worthlessness	0	1	2	3	4 (526)
S 80.	The feeling that something bad is going to happen to you	0	1	2	3	4 (527)
S 81.	Shouting or throwing things	0	1	2	3	4 (528)
S 82.	Feeling afraid you will faint in public	0	1	2	3	4 (529)
S 83.	Feeling that people will take advantage of you if you let them.....	0	1	2	3	4 (530)
S 84.	Having thoughts about sex that bother you a lot	0	1	2	3	4 (531)
S 85.	The idea that you should be punished for your sins	0	1	2	3	4 (532)
S 86.	Thoughts and images of a frightening nature.....	0	1	2	3	4 (533)
S 87.	The idea that something serious is wrong with your body	0	1	2	3	4 (534)
S 88.	Never feeling close to another person	0	1	2	3	4 (535)
S 89.	Feelings of guilt.....	0	1	2	3	4 (536)
S 90.	The idea that something is wrong with your mind	0	1	2	3	4 (537)
S 91.	Repeated, unpleasant dreams or nightmares.....	0	1	2	3	4 (538)
S 92.	Feelings of reliving something very unpleasant and traumatic.....	0	1	2	3	4 (539)
S 93.	Avoiding certain things, places, or activities because they remind you of something unpleasant and traumatic	0	1	2	3	4 (540)
S 94.	Feeling hyperalert.....	0	1	2	3	4 (541)
S 95.	Feeling easily tired	0	1	2	3	4 (542)
S 96.	Less interested in activities once important to you	0	1	2	3	4 (543)
S 97.	Feeling detached or estranged from others.....	0	1	2	3	4 (544)
S 98.	Less upset or angry about things which once caused you to be upset or angry	0	1	2	3	4 (545)
S 99.	Trying to avoid certain thoughts and feelings because they remind you of something unpleasant or traumatic	0	1	2	3	4 (546)

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	
	0	1	2	3	4	
S 100.	Feeling distressed because something reminds you of an unpleasant or traumatic event.....	0	1	2	3	4 (547)
S 101.	Less happy or pleased about things that once caused you to be happy or pleased	0	1	2	3	4 (548)
S 102.	Drinking more alcoholic beverages	0	1	2	3	4 (549)
S 103.	Feeling easily startled	0	1	2	3	4 (550)

DNL

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is True or False as it pertains to you personally. Circle 1. True if the item describes you. Circle 2. False if the item does not describe you.

- | | | | | |
|-------|--|---------|----------|-------|
| T 1. | Before voting I thoroughly investigate the qualifications of all the candidates..... | 1. True | 2. False | (551) |
| T 2. | I never hesitate to go out of my way to help someone in trouble | 1. True | 2. False | (552) |
| T 3. | It is sometimes hard for me to go on with my work if I am not encouraged | 1. True | 2. False | (553) |
| T 4. | I have never intensely disliked anyone | 1. True | 2. False | (554) |
| T 5. | On occasion I have had doubts about my ability to succeed in life | 1. True | 2. False | (555) |
| T 6. | I sometimes feel resentful when I do not get my way..... | 1. True | 2. False | (556) |
| T 7. | I am always careful about my manner of dress..... | 1. True | 2. False | (557) |
| T 8. | My table manners at home are as good as when I eat out in a restaurant..... | 1. True | 2. False | (558) |
| T 9. | If I could get into a movie without paying for it and be sure
I was not seen, I would probably do it | 1. True | 2. False | (559) |
| T 10. | On a few occasions, I have given up doing something because I thought
too little of my ability | 1. True | 2. False | (560) |
| T 11. | I like to gossip at times | 1. True | 2. False | (561) |
| T 12. | There have been times when I felt like rebelling against people
in authority even though I knew they were right | 1. True | 2. False | (562) |
| T 13. | No matter who I'm talking to, I'm always a good listener..... | 1. True | 2. False | (563) |
| T 14. | I can remember "playing sick" to get out of something..... | 1. True | 2. False | (564) |
| T 15. | There have been occasions when I took advantage of someone | 1. True | 2. False | (565) |
| T 16. | I'm always willing to admit it when I make a mistake..... | 1. True | 2. False | (566) |
| T 17. | I always try to practice what I preach..... | 1. True | 2. False | (567) |
| T 18. | I don't find it particularly difficult to get along with loud-mouthed,
obnoxious people | 1. True | 2. False | (568) |
| T 19. | I sometimes try to get even, rather than forgive and forget | 1. True | 2. False | (569) |
| T 20. | When I don't know something I don't at all mind admitting it | 1. True | 2. False | (570) |
| T 21. | I am always courteous, even to people who are disagreeable..... | 1. True | 2. False | (571) |
| T 22. | At times I have really insisted on having things my own way | 1. True | 2. False | (572) |
| T 23. | There have been occasions when I felt like smashing things..... | 1. True | 2. False | (573) |
| T 24. | I would never think of letting someone else be punished for my wrongdoings..... | 1. True | 2. False | (574) |
| T 25. | I never resent being asked to return a favor..... | 1. True | 2. False | (575) |
| T 26. | I have never been irked when people have expressed ideas very different
from my own..... | 1. True | 2. False | (576) |
| T 27. | I never make a long trip without checking the safety of my car..... | 1. True | 2. False | (577) |
| T 28. | There have been times when I was quite jealous of the good fortune of others..... | 1. True | 2. False | (578) |

- T 29. I have almost never felt the urge to tell someone off..... 1. True 2. False (579)
T 30. I am sometimes irritated by people who ask favors of me 1. True 2. False (580)
T 31. I have never felt that I was punished without cause 1. True 2. False (581)
T 32. I sometimes think when people have a misfortune they only got what
they deserved 1. True 2. False (582)
T 33. I have never deliberately said something that hurt someone's feelings 1. True 2. False (583)

RLC

Indicate below the life events that have happened to you by marking an "X" in the appropriate column(s) to the right of each question below to indicate when the event occurred. You may have experienced some of these events over more than one of the time periods listed below. If so, mark ALL the appropriate columns. If the event has NOT happened to you during the time periods indicated leave all the columns blank. The column on the far right labeled "ADJUSTMENT SCORE" will be explained at the end of this section.

		1. Jan 1990 to Your Deployment	2. Your Deployment to 15 Nov 1990	3. Between 16 Nov 1990 and NOW	
FOR THE TIME PERIODS LISTED, HAVE YOU EXPERIENCED:		1. Jan 90- Deployment	2. Deployment- 15 Nov	3. 16 Nov- NOW	ADJUSTMENT SCORE (1-100)
L	1. Marriage?	_____	_____	_____	(584-589)
L	2. Detention in jail or other institution?	_____	_____	_____	(590-595)
L	3. Death of spouse?	_____	_____	_____	(596-601)
L	4. Death of a close friend?	_____	_____	_____	(602-607)
L	5. Minor violation of the law (traffic tickets, disturbing the peace, etc.)?	_____	_____	_____	(608-613)
L	6. Outstanding personal achievement?	_____	_____	_____	(614-619)
L	7. Pregnancy?	_____	_____	_____	(620-625)
L	8. Major change in the health of a family member?	_____	_____	_____	(626-631)
L	9. In-law troubles?	_____	_____	_____	(632-637)
L	10. Major change in financial state (increased income, decreased income, credit rating difficulties)?	_____	_____	_____	(638-643)
L	11. Gaining a new family member (through birth, adoption, oldster moving in, etc.)?	_____	_____	_____	(644-649)
L	12. Change in residence?	_____	_____	_____	(650-655)
L	13. Son or daughter leaving home (marriage, attending college, etc.)?	_____	_____	_____	(656-661)
L	14. Marital separation from mate?	_____	_____	_____	(662-667)
L	15. Marital reconciliation with mate?	_____	_____	_____	(668-673)
L	16. Counseling for marital problems?	_____	_____	_____	(674-679)
L	17. Divorce?	_____	_____	_____	(680-685)
L	18. Major change in jobs?	_____	_____	_____	(686-691)
L	19. Major change in responsibilities at work (promotion, demotion, lateral transfer)?	_____	_____	_____	(692-697)
L	20. Spouse beginning or ceasing work outside the home?	_____	_____	_____	(698-703)
L	21. Major change in working hours or conditions?	_____	_____	_____	(704-709)

FOR THE TIME PERIODS LISTED, HAVE YOU EXPERIENCED:		1. Jan 90- Deployment	2. Deployment- 15 Nov	3. 16 Nov- NOW	ADJUSTMENT SCORE (1-100)	
L 22.	Taking on a mortgage or loan greater than \$10,000, ie purchasing a home, business?	_____	_____	_____	_____	(710-715)
L 23.	Taking on a mortgage or loan less than \$10,000 ie purchasing a car, TV, freezer?	_____	_____	_____	_____	(716-721)
L 24.	Beginning or ceasing formal schooling?	_____	_____	_____	_____	(722-727)
L 25.	An illness or injury which kept you in bed a week or more, or took you to the hospital?	_____	_____	_____	_____	(728-733)
L 26.	Troubles at work?	_____	_____	_____	_____	(734-739)
L 27.	A change in the marital status of your parents (e.g. divorce, remarriage)?	_____	_____	_____	_____	(740-745)
L 28.	Wife (or self) having a miscarriage or an abortion?	_____	_____	_____	_____	(746-751)
L 29.	A new, close, personal relationship?	_____	_____	_____	_____	(752-757)
L 30.	An engagement to marry?	_____	_____	_____	_____	(758-763)
L 31.	A "falling out" of a close personal relationship?	_____	_____	_____	_____	(764-769)
L 32.	A loss or damage of personal property greater than \$1,000?	_____	_____	_____	_____	(770-775)
L 33.	A foreclosure on a mortgage or loan?	_____	_____	_____	_____	(776-781)
L 34.	A motor vehicle accident?	_____	_____	_____	_____	(782-787)

"ADJUSTMENT SCORE" INSTRUCTIONS

Persons adapt to their recent life changes in different ways. Some people find the adjustment to a residential move, for example, to be enormous, while others find very little life adjustment necessary. You are now requested to "score" each of the recent life changes that you marked with an "X" as to the amount of **adjustment** you needed to handle the event.

Your scores can range from **1 to 100 "points."** If, for example, you experienced a recent residential move but felt it required very little life adjustment, you would choose a low number and place it in the blank to the right of the time period blanks. On the other hand, if you recently changed residence and felt it required a near maximal life adjustment, you would place a high number, toward 100, in the blank to the right of that question's time period blanks. For intermediate life adjustment scores you would choose intermediate numbers between 1 and 100.

Please return to the previous page and for each recent life change you indicated with an "X," choose your personal life change **ADJUSTMENT SCORE** (between 1 and 100). This should reflect what you saw to be the **amount of life adjustment** necessary to cope with or handle the event. Use both your estimated intensity of the life change and its duration to arrive at your scores.

**NOW GO BACK TO THE PREVIOUS PAGE AND FILL IN THE COLUMN LABELED
"ADJUSTMENT SCORE" FOR EACH EVENT YOU MARKED WITH "X".**

IF YOU HAVE ANY ADDITIONAL COMMENTS ABOUT YOUR REACTIONS TO DEPLOYMENT
PLEASE USE THE BACK OF THIS PAGE.

_____ (788)

(789-791B)

VII. APPENDIX B: SUPPLEMENTARY TABLES

Table B.1: Distribution of occupation by sex. Comfort survey respondents, time 1.

Occupation	Sex		
Frequency			
Percent			
Row Pct			
Col Pct	male	female	Total
corpsmen	90	24	114
	37.50	10.00	47.50
	78.95	21.05	
	68.18	22.22	
docs	14	5	19
	5.83	2.08	7.92
	73.68	26.32	
	10.61	4.63	
nurses	15	68	83
	6.25	28.33	34.58
	18.07	81.93	
	11.36	62.96	
others	13	11	24
	5.42	4.58	10.00
	54.17	45.83	
	9.85	10.19	
Total	132	108	240
	55.00	45.00	100.00

Frequency Missing = 10

STATISTICS FOR TABLE OF Occupation BY Sex

Statistic	DF	Value	Prob
Chi-Square	3	74.832	0.000
Likelihood Ratio Chi-Square	3	79.528	0.000
Mantel-Haenszel Chi-Square	1	46.948	0.000
Phi Coefficient		0.558	
Contingency Coefficient		0.488	
Cramer's V		0.558	

Effective Sample Size = 240

Frequency Missing = 10

Table B.2: Distribution of age by sex. Comfort survey - respondents, time 1.

Sex	Age (years)		
Frequency			
Percent			
Row Pct			
Col Pct	18-25	26-55	Total
male	73	65	138
	29.55	26.32	55.87
	52.90	47.10	
	64.04	48.87	
female	41	68	109
	16.60	27.53	44.13
	37.61	62.39	
	35.96	51.13	
Total	114	133	247
	46.15	53.85	100.00

Frequency Missing = 3

STATISTICS FOR TABLE OF Sex BY Age

Statistic	DF	Value	Prob
Chi-Square	1	5.724	0.017
Likelihood Ratio Chi-Square	1	5.759	0.016
Continuity Adj. Chi-Square	1	5.126	0.024
Mantel-Haenszel Chi-Square	1	5.701	0.017
Fisher's Exact Test (Left)			0.994
(Right)		0.012	
(2-Tail)		0.021	
Phi Coefficient		0.152	
Contingency Coefficient		0.150	
Cramer's V		0.152	

Effective Sample Size = 247

Frequency Missing = 3

Table B.3: Distribution of race/ethnic background by sex.
Comfort survey respondents, time 1.

Sex	Race/ Ethnic Background					
Frequency						
Percent						
Row Pct						
Col Pct	white	black	oriental	hispanic	other	Total
male	100	17	7	11	0	135
	41.15	7.00	2.88	4.53	0.00	55.56
	74.07	12.59	5.19	8.15	0.00	
	52.08	62.96	87.50	78.57	0.00	
female	92	10	1	3	2	108
	37.86	4.12	0.41	1.23	0.82	44.44
	85.19	9.26	0.93	2.78	1.85	
	47.92	37.04	12.50	21.43	100.00	
Total	192	27	8	14	2	243
	79.01	11.11	3.29	5.76	0.82	100.00

Frequency Missing = 7

STATISTICS FOR TABLE OF Sex BY Race

Statistic	DF	Value	Prob
Chi-Square	4	10.347	0.035
Likelihood Ratio Chi-Square	4	11.857	0.018
Mantel-Haenszel Chi-Square	1	3.382	0.066
Phi Coefficient		0.206	
Contingency Coefficient		0.202	
Cramer's V		0.206	

Effective Sample Size = 243

Frequency Missing = 7

WARNING: 40% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.4: Distribution of education by sex. Comfort survey respondents, time 1.

Sex		Education					
Frequency	Percent						
Row Pct	Col Pct	less tha	high sch	some col	bachelor	other	Total
		n 12th	ool	lege	degree		
male		8	41	47	21	6	123
		3.46	17.75	20.35	9.09	2.60	53.25
		6.50	33.33	38.21	17.07	4.88	
		100.00	68.33	77.05	27.63	23.08	
female		0	19	14	55	20	108
		0.00	8.23	6.06	23.81	8.66	46.75
		0.00	17.59	12.96	50.93	18.52	
		0.00	31.67	22.95	72.37	76.92	
Total		8	60	61	76	26	231
3.46	25.97	26.41	32.90	11.26	100.00		

Frequency Missing = 19

STATISTICS FOR TABLE OF Sex BY Education

Statistic	DF	Value	Prob
Chi-Square	4	55.930	0.000
Likelihood Ratio Chi-Square	4	60.935	0.000
Mantel-Haenszel Chi-Square	1	41.052	0.000
Phi Coefficient		0.492	
Contingency Coefficient		0.442	
Cramer's V		0.492	

Effective Sample Size = 231
Frequency Missing = 19

Table B.5: Distribution of Marital status by sex. Comfort survey respondents, time 1.

Sex		Marital Status						
Frequency	Percent							
Row Pct	Col Pct	nev marr	single +	married	sep/div	div+ rem	other	Total
		ied	sig oth	only onc	+ not r	ar/sig o		
male		67	3	53	6	6	3	138
		27.13	1.21	21.46	2.43	2.43	1.21	55.87
		48.55	2.17	38.41	4.35	4.35	2.17	
		50.00	33.33	70.67	60.00	40.00	75.00	
female		67	6	22	4	9	1	109
		27.13	2.43	8.91	1.62	3.64	0.40	44.13
		61.47	5.50	20.18	3.67	8.26	0.92	
		50.00	66.67	29.33	40.00	60.00	25.00	
Total		134	9	75	10	15	4	247
		54.25	3.64	30.36	4.05	6.07	1.62	100.00

Frequency Missing = 3

STATISTICS FOR TABLE OF Sex BY Marital Status

Statistic	DF	Value	Prob
Chi-Square	5	12.582	0.028
Likelihood Ratio Chi-Square	5	12.866	0.025
Mantel-Haenszel Chi-Square	1	2.235	0.135
Phi Coefficient		0.226	
Contingency Coefficient		0.220	
Cramer's V		0.226	

Effective Sample Size = 247

Frequency Missing = 3

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.6: Distribution of parental status by sex. Comfort survey respondents, time 1.

Sex			
Have Children			
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	55	83	138
	22.18	33.47	55.65
	39.86	60.14	
	68.75	49.40	
female	25	85	110
	10.08	34.27	44.35
	22.73	77.27	
	31.25	50.60	
Total	80	168	248
	32.26	67.74	100.00

Frequency Missing = 2

STATISTICS FOR TABLE OF Sex BY Have Children

Statistic	DF	Value	Prob
Chi-Square	1	8.217	0.004
Likelihood Ratio Chi-Square	1	8.385	0.004
Continuity Adj. Chi-Square	1	7.452	0.006
Mantel-Haenszel Chi-Square	1	8.184	0.004
Fisher's Exact Test (Left)			0.999
(Right)		2.96E-03	
(2-Tail)		4.26E-03	
Phi Coefficient		0.182	
Contingency Coefficient		0.179	
Cramer's V		0.182	

Effective Sample Size = 248

Frequency Missing = 2

Table B.7: Distribution of number of children by sex. -
Comfort survey respondents, time 1.

Sex		Number of Children			
Frequency					
Percent					
Row Pct					
Col Pct					
	1	2	3	4	Total
male	27	21	5	2	55
	33.33	25.93	6.17	2.47	67.90
	49.09	38.18	9.09	3.64	
	67.50	70.00	55.56	100.00	
female	13	9	4	0	26
	16.05	11.11	4.94	0.00	32.10
	50.00	34.62	15.38	0.00	
	32.50	30.00	44.44	0.00	
Total	40	30	9	2	81
	49.38	37.04	11.11	2.47	100.00

Frequency Missing = 169

STATISTICS FOR TABLE OF Sex BY Number of Children

Statistic	DF	Value	Prob
Chi-Square	3	1.638	0.651
Likelihood Ratio Chi-Square	3	2.209	0.530
Mantel-Haenszel Chi-Square	1	0.010	0.918
Phi Coefficient		0.142	
Contingency Coefficient		0.141	
Cramer's V		0.142	

Effective Sample Size = 81

Frequency Missing = 169

WARNING: 68% of the data are missing.

WARNING: 38% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.8: Distribution of experience working with
Desert Shield casualties by sex. Comfort
survey respondents, time 1.

Sex	Work with Desert Shield Casualty		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	110	25	135
	45.08	10.25	55.33
	81.48	18.52	
	60.11	40.98	
female	73	36	109
	29.92	14.75	44.67
	66.97	33.03	
	39.89	59.02	
Total	183	61	244
	75.00	25.00	100.00

Frequency Missing = 6

STATISTICS FOR TABLE OF Sex BY Work w Desert Shield Casualty

Statistic	DF	Value	Prob
Chi-Square	1	6.771	0.009
Likelihood Ratio Chi-Square	1	6.751	0.009
Continuity Adj. Chi-Square	1	6.019	0.014
Mantel-Haenszel Chi-Square	1	6.743	0.009
Fisher's Exact Test (Left)			0.997
(Right)		7.14E-03	
(2-Tail)		0.011	
Phi Coefficient		0.167	
Contingency Coefficient		0.164	
Cramer's V		0.167	

Effective Sample Size = 244

Frequency Missing = 6

Table B.9: Distribution of prior sea duty by sex.
Comfort survey respondents, time 1.

Sex	Prior Sea Duty		
	yes	no	Total
	Frequency	Frequency	Frequency
	Percent	Percent	Percent
Row Pct	Col Pct	Col Pct	Col Pct
male	38	99	137
	15.38	40.08	55.47
	27.74	72.26	
	86.36	48.77	
female	6	104	110
	2.43	42.11	44.53
	5.45	94.55	
	13.64	51.23	
Total	44	203	247
	17.81	82.19	100.00

Frequency Missing = 3

STATISTICS FOR TABLE OF Sex BY Prior Sea Duty

Statistic	DF	Value	Prob
Chi-Square	1	20.692	0.000
Likelihood Ratio Chi-Square	1	23.112	0.000
Continuity Adj. Chi-Square	1	19.198	0.000
Mantel-Haenszel Chi-Square	1	20.608	0.000
Fisher's Exact Test (Left)			1.000
(Right)		2.11E-06	
(2-Tail)		3.40E-06	
Phi Coefficient		0.289	
Contingency Coefficient		0.278	
Cramer's V		0.289	

Effective Sample Size = 247

Frequency Missing = 3

Table B.10: Distribution of prior isolated duty
by sex. Comfort survey respondents, time 1.

Sex	Prior Isolated Duty		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	22 8.94 16.06 70.97	115 46.75 83.94 53.49	137 55.69
female	9 3.66 8.26 29.03	100 40.65 91.74 46.51	109 44.31
Total	31 12.60	215 87.40	246 100.00

Frequency Missing = 4

STATISTICS FOR TABLE OF Sex BY Prior Isolated Duty

Statistic	DF	Value	Prob
Chi-Square	1	3.355	0.067
Likelihood Ratio Chi-Square	1	3.477	0.062
Continuity Adj. Chi-Square	1	2.684	0.101
Mantel-Haenszel Chi-Square	1	3.341	0.068
Fisher's Exact Test (Left)			0.980
(Right)		0.049	
(2-Tail)		0.082	
Phi Coefficient		0.117	
Contingency Coefficient		0.116	
Cramer's V		0.117	

Effective Sample Size = 246
Frequency Missing = 4

Table B.11: Distribution of prior experience in the Middle East by sex. Comfort survey respondents, time 1.

Sex	Prior Experience in the Mid East		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	10	127	137
	4.05	51.42	55.47
	7.30	92.70	
	71.43	54.51	
female	4	106	110
	1.62	42.91	44.53
	3.64	96.36	
	28.57	45.49	
Total	14	233	247
	5.67	94.33	100.00

Frequency Missing = 3

STATISTICS FOR TABLE OF Sex BY Prior Experience in the Mid East

Statistic	DF	Value	Prob
Chi-Square	1	1.531	0.216
Likelihood Ratio Chi-Square	1	1.595	0.207
Continuity Adj. Chi-Square	1	0.923	0.337
Mantel-Haenszel Chi-Square	1	1.525	0.217
Fisher's Exact Test (Left)			0.938
(Right)		0.169	
(2-Tail)		0.274	
Phi Coefficient		0.079	
Contingency Coefficient		0.078	
Cramer's V		0.079	

Effective Sample Size = 247

Frequency Missing = 3

Table B.12: Distribution of Experience participating in mass casualty or disasters by sex. Comfort survey respondents, time 1.

Sex	Participated in Mass Casualty/ Disasters		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	51 20.73 37.50 65.38	85 34.55 62.50 50.60	136 55.28
female	27 10.98 24.55 34.62	83 33.74 75.45 49.40	110 44.72
Total	78 31.71	168 68.29	246 100.00

Frequency Missing = 4

STATISTICS FOR TABLE OF Sex BY Participation

Statistic	DF	Value	Prob
Chi-Square	1	4.713	0.030
Likelihood Ratio Chi-Square	1	4.776	0.029
Continuity Adj. Chi-Square	1	4.134	0.042
Mantel-Haenszel Chi-Square	1	4.694	0.030
Fisher's Exact Test (Left)			0.990
(Right)		0.021	
(2-Tail)		0.038	
Phi Coefficient		0.138	
Contingency Coefficient		0.137	
Cramer's V		0.138	

Effective Sample Size = 246

Frequency Missing = 4

Table B.13: Distribution of Experience working with dead bodies by sex. Comfort survey respondents, time 1.

Sex	Worked with Dead Bodies		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	99 39.76 71.74 54.70	39 15.66 28.26 57.35	138 55.42
female	82 32.93 73.87 45.30	29 11.65 26.13 42.65	111 44.58
Total	181 72.69	68 27.31	249 100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Work w Dead Bodies

Statistic	DF	Value	Prob
Chi-Square	1	0.141	0.707
Likelihood Ratio Chi-Square	1	0.142	0.707
Continuity Adj. Chi-Square	1	0.054	0.816
Mantel-Haenszel Chi-Square	1	0.141	0.708
Fisher's Exact Test (Left)			0.409
(Right)		0.697	
(2-Tail)		0.775	
Phi Coefficient		-0.024	
Contingency Coefficient		0.024	
Cramer's V		-0.024	

Effective Sample Size = 249
Frequency Missing = 1

Table B.14: Distribution of Experience of patient death by sex. Comfort survey respondents, time 1.

Sex			
Ever Had a Patient Die			
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	91	47	138
	36.55	18.88	55.42
	65.94	34.06	
	51.12	66.20	
female	87	24	111
	34.94	9.64	44.58
	78.38	21.62	
	48.88	33.80	
Total	178	71	249
	71.49	28.51	100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Ever Had a Patient Die

Statistic	DF	Value	Prob
Chi-Square	1	4.668	0.031
Likelihood Ratio Chi-Square	1	4.743	0.029
Continuity Adj. Chi-Square	1	4.078	0.043
Mantel-Haenszel Chi-Square	1	4.649	0.031
Fisher's Exact Test (Left)			0.021
(Right)		0.990	
(2-Tail)		0.035	
Phi Coefficient		-0.137	
Contingency Coefficient		0.136	
Cramer's V		-0.137	

Effective Sample Size = 249

Frequency Missing = 1

Table B.15: Distribution of FMSS Operational Readiness Training by sex. Comfort survey respondents, time 1.

Sex	FMSS Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	28 13.40 24.56 90.32	86 41.15 75.44 48.31	114 54.55
female	3 1.44 3.16 9.68	92 44.02 96.84 51.69	95 45.45
Total	31 14.83	178 85.17	209 100.00

Frequency Missing = 41

STATISTICS FOR TABLE OF Sex BY FMSS Operational Readiness Tng

Statistic	DF	Value	Prob
Chi-Square	1	18.792	0.000
Likelihood Ratio Chi-Square	1	21.736	0.000
Continuity Adj. Chi-Square	1	17.135	0.000
Mantel-Haenszel Chi-Square	1	18.702	0.000
Fisher's Exact Test (Left)			1.000
(Right)		5.34E-06	
(2-Tail)		7.86E-06	
Phi Coefficient		0.300	
Contingency Coefficient		0.287	
Cramer's V		0.300	

Effective Sample Size = 209

Frequency Missing = 41

WARNING: 16% of the data are missing.

Table B.16: Distribution of ACLS Operational Readiness Training by sex.
Comfort survey respondents, time 1.

Sex	ACLS Operational Readiness Training		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	43	75	118
	19.37	33.78	53.15
	36.44	63.56	
	45.26	59.06	
female	52	52	104
	23.42	23.42	46.85
	50.00	50.00	
	54.74	40.94	
Total	95	127	222
	42.79	57.21	100.00

Frequency Missing = 28

STATISTICS FOR TABLE OF Sex BY ACLS Operational Readiness Tng

Statistic	DF	Value	Prob
Chi-Square	1	4.152	0.042
Likelihood Ratio Chi-Square	1	4.159	0.041
Continuity Adj. Chi-Square	1	3.616	0.057
Mantel-Haenszel Chi-Square	1	4.133	0.042
Fisher's Exact Test (Left)			0.029
(Right)		0.985	
(2-Tail)		0.057	
Phi Coefficient		-0.137	
Contingency Coefficient		0.135	
Cramer's V		-0.137	

Effective Sample Size = 222

Frequency Missing = 28

WARNING: 11% of the data are missing.

Table B.17: Distribution of ATLS Operational Readiness Training by sex. Comfort survey respondents, time 1.

Sex	ATLS Operational Readiness Tng		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	28	85	113
	13.21	40.09	53.30
	24.78	75.22	
	46.67	55.92	
female	32	67	99
	15.09	31.60	46.70
	32.32	67.68	
	53.33	44.08	
Total	60	152	212
	28.30	71.70	100.00

Frequency Missing = 38

STATISTICS FOR TABLE OF Sex BY ATLS ORT

Statistic	DF	Value	Prob
Chi-Square	1	1.480	0.224
Likelihood Ratio Chi-Square	1	1.478	0.224
Continuity Adj. Chi-Square	1	1.132	0.287
Mantel-Haenszel Chi-Square	1	1.473	0.225
Fisher's Exact Test (Left)			0.144
(Right)		0.915	
(2-Tail)		0.285	
Phi Coefficient		-0.084	
Contingency Coefficient		0.083	
Cramer's V		-0.084	

Effective Sample Size = 212

Frequency Missing = 38

WARNING: 15% of the data are missing.

Table B.18: Distribution of C4 Operational Readiness Training by sex.
Comfort survey respondents, time 1.

Sex	C4 Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	34 16.27 30.36 62.96	78 37.32 69.64 50.32	112 53.59
female	20 9.57 20.62 37.04	77 36.84 79.38 49.68	97 46.41
Total	54 25.84	155 74.16	209 100.00

Frequency Missing = 41

STATISTICS FOR TABLE OF Sex BY C4 Oper Read Tng

Statistic	DF	Value	Prob
Chi-Square	1	2.573	0.109
Likelihood Ratio Chi-Square	1	2.600	0.107
Continuity Adj. Chi-Square	1	2.090	0.148
Mantel-Haenszel Chi-Square	1	2.560	0.110
Fisher's Exact Test (Left)			0.962
(Right)		0.074	
(2-Tail)		0.116	
Phi Coefficient		0.111	
Contingency Coefficient		0.110	
Cramer's V		0.111	

Effective Sample Size = 209

Frequency Missing = 41

WARNING: 16% of the data are missing.

Table B.19: Distribution of Damage Control Operational Readiness Training by sex. Comfort survey respondents, time 1.

Sex	Damage Control Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	71 32.72 59.17 71.72	49 22.58 40.83 41.53	120 55.30
female	28 12.90 28.87 28.28	69 31.80 71.13 58.47	97 44.70
Total	99 45.62	118 54.38	217 100.00

Frequency Missing = 33

STATISTICS FOR TABLE OF Sex BY Damage Control OR Tng

Statistic	DF	Value	Prob
Chi-Square	1	19.852	0.000
Likelihood Ratio Chi-Square	1	20.277	0.000
Continuity Adj. Chi-Square	1	18.649	0.000
Mantel-Haenszel Chi-Square	1	19.760	0.000
Fisher's Exact Test (Left)			1.000
(Right)		6.52E-06	
(2-Tail)		1.02E-05	
Phi Coefficient		0.302	
Contingency Coefficient		0.290	
Cramer's V		0.302	

Effective Sample Size = 217

Frequency Missing = 33

WARNING: 13% of the data are missing.

Table B.20: Distribution of shipboard orientation by sex. Comfort survey respondents, time 1.

Sex	Shipboard Orientation		
	Operational Readiness		
Frequency	yes	no	Total
Percent			
Row Pct	yes	no	Total
Col Pct			
male	106	19	125
	45.69	8.19	53.88
	84.80	15.20	
	55.21	47.50	
female	86	21	107
	37.07	9.05	46.12
	80.37	19.63	
	44.79	52.50	
Total	192	40	232
	82.76	17.24	100.00

Frequency Missing = 18

STATISTICS FOR TABLE OF Sex BY Shipboard Orientation

Statistic	DF	Value	Prob
Chi-Square	1	0.792	0.374
Likelihood Ratio Chi-Square	1	0.789	0.374
Continuity Adj. Chi-Square	1	0.512	0.474
Mantel-Haenszel Chi-Square	1	0.788	0.375
Fisher's Exact Test (Left)			0.856
(Right)		0.237	
(2-Tail)		0.389	
Phi Coefficient		0.058	
Contingency Coefficient		0.058	
Cramer's V		0.058	

Effective Sample Size = 232

Frequency Missing = 18

Table B.21: Distribution of MMART Team experience readiness training by sex. Comfort survey respondents, time 1.

Sex	MMART Team Experience Operational Readiness Tng		
	yes	no	Total
Frequency			
Percent			
Row Pct			
Col Pct			
male	17 8.42 15.74 80.95	91 45.05 84.26 50.28	108 53.47
female	4 1.98 4.26 19.05	90 44.55 95.74 49.72	94 46.53
Total	21 10.40	181 89.60	202 100.00

Frequency Missing = 48

STATISTICS FOR TABLE OF Sex BY MMART Team

Statistic	DF	Value	Prob
Chi-Square	1	7.117	0.008
Likelihood Ratio Chi-Square	1	7.696	0.006
Continuity Adj. Chi-Square	1	5.937	0.015
Mantel-Haenszel Chi-Square	1	7.082	0.008
Fisher's Exact Test (Left)			0.999
(Right)		6.14E-03	
(2-Tail)		9.88E-03	
Phi Coefficient		0.188	
Contingency Coefficient		0.184	
Cramer's V		0.188	

Effective Sample Size = 202

Frequency Missing = 48

WARNING: 19% of the data are missing.

Table B.22: Distribution of RADMUF Operational readiness training by sex. Comfort survey respondents, time 1.

Sex		RADMUF		
Frequency		Operational Readiness Tng		
Percent				
Row Pct				
Col Pct	yes	no	Total	
male	7	103	110	
	3.40	50.00	53.40	
	6.36	93.64		
	36.84	55.08		
female	12	84	96	
	5.83	40.78	46.60	
	12.50	87.50		
	63.16	44.92		
Total	19	187	206	
	9.22	90.78	100.00	

Frequency Missing = 44

STATISTICS FOR TABLE OF Sex BY RADMUF Tng

Statistic	DF	Value	Prob
Chi-Square	1	2.305	0.129
Likelihood Ratio Chi-Square	1	2.313	0.128
Continuity Adj. Chi-Square	1	1.631	0.202
Mantel-Haenszel Chi-Square	1	2.294	0.130
Fisher's Exact Test (Left)			0.101
(Right)		0.961	
(2-Tail)		0.152	
Phi Coefficient		-0.106	
Contingency Coefficient		0.105	
Cramer's V		-0.106	

Effective Sample Size = 206

Frequency Missing = 44

WARNING: 18% of the data are missing.

Table B.23: Distribution of MEDSTAR Operational readiness training by sex. Comfort survey respondents, time 1.

Sex	MEDSTAR Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	8	101	109
	3.96	50.00	53.96
	7.34	92.66	
	88.89	52.33	
female	1	92	93
	0.50	45.54	46.04
	1.08	98.92	
	11.11	47.67	
Total	9	193	202
	4.46	95.54	100.00

Frequency Missing = 48

STATISTICS FOR TABLE OF Sex BY MEDSTAR Operational Tng

Statistic	DF	Value	Prob
Chi-Square	1	4.626	0.031
Likelihood Ratio Chi-Square	1	5.349	0.021
Continuity Adj. Chi-Square	1	3.271	0.071
Mantel-Haenszel Chi-Square	1	4.603	0.032
Fisher's Exact Test (Left)			0.997
(Right)		0.031	
(2-Tail)		0.040	
Phi Coefficient		0.151	
Contingency Coefficient		0.150	
Cramer's V		0.151	

Effective Sample Size = 202

Frequency Missing = 48

WARNING: 19% of the data are missing.

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.24: Distribution of IDT Operational Readiness-
Training by sex. Comfort survey respondents, time 1.

Sex	IDT Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	5 2.50 4.67 100.00	102 51.00 95.33 52.31	107 53.50
female	0 0.00 0.00 0.00	93 46.50 100.00 47.69	93 46.50
Total	5 2.50	195 97.50	200 100.00

Frequency Missing = 50

STATISTICS FOR TABLE OF Sex BY IDT Operational Readiness Tng

Statistic	DF	Value	Prob
Chi-Square	1	4.457	0.035
Likelihood Ratio Chi-Square	1	6.366	0.012
Continuity Adj. Chi-Square	1	2.746	0.097
Mantel-Haenszel Chi-Square	1	4.435	0.035
Fisher's Exact Test (Left)			1.000
(Right)		0.042	
(2-Tail)		0.062	
Phi Coefficient		0.149	
Contingency Coefficient		0.148	
Cramer's V		0.149	

Effective Sample Size = 200

Frequency Missing = 50

WARNING: 20% of the data are missing.

WARNING: 50% of the cells have expected counts less
than 5. Chi-Square may not be a valid test.

Table B.25: Distribution of hours of sleep by sex.
Comfort survey respondents, time 1.

Sex		Hours of Sleep			
Frequency	Percent				
Row Pct	Col Pct	3-5 hrs	6-9 hrs	10-12 hr s	Total
male		27	96	7	130
		11.34	40.34	2.94	54.62
		20.77	73.85	5.38	
		60.00	53.04	58.33	
female		18	85	5	108
		7.56	35.71	2.10	45.38
		16.67	78.70	4.63	
		40.00	46.96	41.67	
Total		45	181	12	238
		18.91	76.05	5.04	100.00

Frequency Missing = 12

STATISTICS FOR TABLE OF Sex BY Hours of Sleep

Statistic	DF	Value	Prob
Chi-Square	2	0.775	0.679
Likelihood Ratio Chi-Square	2	0.779	0.677
Mantel-Haenszel Chi-Square	1	0.299	0.585
Phi Coefficient		0.057	
Contingency Coefficient		0.057	
Cramer's V		0.057	

Effective Sample Size = 238

Frequency Missing = 12

Table B.26: Distribution of self-reported weight status by sex. Comfort survey respondents, time 1.

Sex		Self-Reported Weight Status			
Frequency	Percent	gained w t	lost wt	stayed s ame	Total
Row Pct	Col Pct				
male		41 17.45 32.03 55.41	40 17.02 31.25 55.56	47 20.00 36.72 52.81	128 54.47
female		33 14.04 30.84 44.59	32 13.62 29.91 44.44	42 17.87 39.25 47.19	107 45.53
Total		74 31.49	72 30.64	89 37.87	235 100.00

Frequency Missing = 15

STATISTICS FOR TABLE OF Sex BY WEIGHTT1

Statistic	DF	Value	Prob
Chi-Square	2	0.159	0.923
Likelihood Ratio Chi-Square	2	0.159	0.923
Mantel-Haenszel Chi-Square	1	0.117	0.733
Phi Coefficient		0.026	
Contingency Coefficient		0.026	
Cramer's V		0.026	

Effective Sample Size = 235
Frequency Missing = 15

Table B.27: Distribution of those receiving an annual - physical on board by sex. Comfort survey respondents, time 1.

Sex	Annual Physical on Board		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	4 1.67 3.05 33.33	127 53.14 96.95 55.95	131 54.81
female	8 3.35 7.41 66.67	100 41.84 92.59 44.05	108 45.19
Total	12 5.02	227 94.98	239 100.00

Frequency Missing = 11

STATISTICS FOR TABLE OF Sex BY Annual Physical on Board

Statistic	DF	Value	Prob
Chi-Square	1	2.353	0.125
Likelihood Ratio Chi-Square	1	2.361	0.124
Continuity Adj. Chi-Square	1	1.529	0.216
Mantel-Haenszel Chi-Square	1	2.343	0.126
Fisher's Exact Test (Left)			0.108
(Right)		0.967	
(2-Tail)		0.146	
Phi Coefficient		-0.099	
Contingency Coefficient		0.099	
Cramer's V		-0.099	

Effective Sample Size = 239

Frequency Missing = 11

Table B.28: Distribution of those requiring care for physical problems by sex. Comfort survey respondents, time 1.

Sex	On Board Medical Care for Physical Problems		Total
	yes	no	
	Frequency		
	Percent		
Row Pct			
Col Pct			
male	69	67	136
	28.05	27.24	55.28
	50.74	49.26	
	49.29	63.21	
female	71	39	110
	28.86	15.85	44.72
	64.55	35.45	
	50.71	36.79	
Total	140	106	246
	56.91	43.09	100.00

Frequency Missing = 4

STATISTICS FOR TABLE OF Sex BY Medical Tng for Physical Problems

Statistic	DF	Value	Prob
Chi-Square	1	4.730	0.030
Likelihood Ratio Chi-Square	1	4.760	0.029
Continuity Adj. Chi-Square	1	4.183	0.041
Mantel-Haenszel Chi-Square	1	4.710	0.030
Fisher's Exact Test (Left)			0.020
(Right)		0.990	
(2-Tail)		0.038	
Phi Coefficient		-0.139	
Contingency Coefficient		0.137	
Cramer's V		-0.139	

Effective Sample Size = 246

Frequency Missing = 4

Table B.29 : Distribution of those treated for emotional problems by sex. Comfort survey respondents, time 1.

Sex	On Board Medical Care for Emotional Problems		
Frequency Percent Row Pct Col Pct	yes	no	Total
male	6 2.52 4.58 35.29	125 52.52 95.42 56.56	131 55.04
female	11 4.62 10.28 64.71	96 40.34 89.72 43.44	107 44.96
Total	17 7.14	221 92.86	238 100.00

Frequency Missing = 12

STATISTICS FOR TABLE OF Sex BY Care for Emotional Problems

Statistic	DF	Value	Prob
Chi-Square	1	2.885	0.089
Likelihood Ratio Chi-Square	1	2.885	0.089
Continuity Adj. Chi-Square	1	2.090	0.148
Mantel-Haenszel Chi-Square	1	2.873	0.090
Fisher's Exact Test (Left)			0.074
(Right)		0.975	
(2-Tail)		0.128	
Phi Coefficient		-0.110	
Contingency Coefficient		0.109	
Cramer's V		-0.110	

Effective Sample Size = 238

Frequency Missing = 12

Table B.30: Distribution of those needing but not seeking medical care on board. Comfort survey respondents, time 1.

Sex	Medical Care Needed But Not Obtained		
	yes	no	Total
Frequency			
Percent			
Row Pct			
Col Pct			
male	14 6.03 10.69 50.00	117 50.43 89.31 57.35	131 56.47
female	14 6.03 13.86 50.00	87 37.50 86.14 42.65	101 43.53
Total	28 12.07	204 87.93	232 100.00

Frequency Missing = 18

STATISTICS FOR TABLE OF Sex BY No Care Obtained

Statistic	DF	Value	Prob
Chi-Square	1	0.542	0.462
Likelihood Ratio Chi-Square	1	0.538	0.463
Continuity Adj. Chi-Square	1	0.284	0.594
Mantel-Haenszel Chi-Square	1	0.539	0.463
Fisher's Exact Test (Left)			0.296
(Right)		0.826	
(2-Tail)		0.543	
Phi Coefficient		-0.048	
Contingency Coefficient		0.048	
Cramer's V		-0.048	

Effective Sample Size = 232
Frequency Missing = 18

Table B.31: Distribution of age by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	Age		Total
	18-25	26-55 me d splt	
Frequency			
Percent			
Row Pct			
Col Pct			
male	65 57.02 72.22 82.28	25 21.93 27.78 71.43	90 78.95
female	14 12.28 58.33 17.72	10 8.77 41.67 28.57	24 21.05
Total	79 69.30	35 30.70	114 100.00

STATISTICS FOR TABLE OF Sex BY Age

Statistic	DF	Value	Prob
Chi-Square	1	1.718	0.190
Likelihood Ratio Chi-Square	1	1.653	0.199
Continuity Adj. Chi-Square	1	1.127	0.288
Mantel-Haenszel Chi-Square	1	1.703	0.192
Fisher's Exact Test (Left)			0.938
(Right)			0.145
(2-Tail)			0.217
Phi Coefficient		0.123	
Contingency Coefficient		0.122	
Cramer's V		0.123	

Sample Size = 114

Table B.32: Distribution of race/ethnic background by sex.
Comfort survey respondents - corpsmen only, time 1.

Sex		Race/Ethnic Background				
Frequency	Percent					
Row Pct	Col Pct	white	black	oriental	hispanic	other
Col Pct						
male		61	14	5	8	0
		54.46	12.50	4.46	7.14	0.00
		69.32	15.91	5.68	9.09	0.00
		77.22	82.35	83.33	88.89	0.00
female		18	3	1	1	1
		16.07	2.68	0.89	0.89	0.89
		75.00	12.50	4.17	4.17	4.17
		22.78	17.65	16.67	11.11	100.00
Total		79	17	6	9	1
		70.54	15.18	5.36	8.04	0.89
						112
						100.00

Frequency Missing = 2

STATISTICS FOR TABLE OF Sex BY Race/Ethnic Background

Statistic	DF	Value	Prob
Chi-Square	4	4.547	0.337
Likelihood Ratio Chi-Square	4	4.063	0.397
Mantel-Haenszel Chi-Square	1	0.041	0.840
Phi Coefficient		0.201	
Contingency Coefficient		0.198	
Cramer's V		0.201	

Effective Sample Size = 112

Frequency Missing = 2

WARNING: 60% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.33: Distribution of education by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	Education					Total
	less than 12th	high school	some college	bachelor degree	other	
Frequency						
Percent						
Row Pct						
Col Pct						
male	8 7.08 8.99 100.00	37 32.74 41.57 72.55	39 34.51 43.82 88.64	2 1.77 2.25 40.00	3 2.65 3.37 60.00	89 78.76
female	0 0.00 0.00 0.00	14 12.39 58.33 27.45	5 4.42 20.83 11.36	3 2.65 12.50 60.00	2 1.77 8.33 40.00	24 21.24
Total	8 7.08	51 45.13	44 38.94	5 4.42	5 4.42	113 100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Education

Statistic	DF	Value	Prob
Chi-Square	4	11.442	0.022
Likelihood Ratio Chi-Square	4	12.304	0.015
Mantel-Haenszel Chi-Square	1	1.153	0.283
Phi Coefficient		0.318	
Contingency Coefficient		0.303	
Cramer's V		0.318	

Effective Sample Size = 113

Frequency Missing = 1

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.34: Distribution of Marital status by sex. Comfort survey respondents - corpsmen only, time 1.

Sex		Marital Status						
Frequency	Percent							
Row Pct	Col Pct	nev marr	single +	married	sep/div	div+ rem	other	Total
		ied	sig oth	only onc	+ not r	ar/sig o		
male		58	2	22	3	2	3	90
		51.33	1.77	19.47	2.65	1.77	2.65	79.65
		64.44	2.22	24.44	3.33	2.22	3.33	
		79.45	50.00	84.62	60.00	100.00	100.00	
female		15	2	4	2	0	0	23
		13.27	1.77	3.54	1.77	0.00	0.00	20.35
		65.22	8.70	17.39	8.70	0.00	0.00	
		20.55	50.00	15.38	40.00	0.00	0.00	
Total		73	4	26	5	2	3	113
		64.60	3.54	23.01	4.42	1.77	2.65	100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Marital Status

Statistic	DF	Value	Prob
Chi-Square	5	5.035	0.412
Likelihood Ratio Chi-Square	5	5.437	0.365
Mantel-Haenszel Chi-Square	1	0.330	0.566
Phi Coefficient		0.211	
Contingency Coefficient		0.207	
Cramer's V		0.211	

Effective Sample Size = 113

Frequency Missing = 1

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.35: Distribution of parental status by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	Have Children		Total
	yes	no	
	Frequency	Percent	
	Row Pct	Col Pct	
male	23	67	90
	20.35	59.29	79.65
	25.56	74.44	
	82.14	78.82	
female	5	18	23
	4.42	15.93	20.35
	21.74	78.26	
	17.86	21.18	
Total	28	85	113
	24.78	75.22	100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Have Children

Statistic	DF	Value	Prob
Chi-Square	1	0.143	0.705
Likelihood Ratio Chi-Square	1	0.146	0.702
Continuity Adj. Chi-Square	1	0.012	0.914
Mantel-Haenszel Chi-Square	1	0.142	0.706
Fisher's Exact Test	(Left)		0.736
	(Right)		0.468
	(2-Tail)		0.793
Phi Coefficient		0.036	
Contingency Coefficient		0.036	
Cramer's V		0.036	

Effective Sample Size = 113

Frequency Missing = 1

Table B.36: Distribution of number of children by sex.
Comfort survey respondents - corpsmen only, time 1.

Sex		Number of Children			
Frequency	Percent				
Row Pct	Col Pct	1	2	3	Total
male		16	6	1	23
		55.17	20.69	3.45	79.31
		69.57	26.09	4.35	
		80.00	75.00	100.00	
female		4	2	0	6
		13.79	6.90	0.00	20.69
		66.67	33.33	0.00	
		20.00	25.00	0.00	
Total		20	8	1	29
		68.97	27.59	3.45	100.00

Frequency Missing = 85

STATISTICS FOR TABLE OF Sex BY Number of Children

Statistic	DF	Value	Prob
Chi-Square	2	0.357	0.836
Likelihood Ratio Chi-Square	2	0.556	0.757
Mantel-Haenszel Chi-Square	1	0.003	0.954
Phi Coefficient		0.111	
Contingency Coefficient		0.110	
Cramer's V		0.111	

Effective Sample Size = 29

Frequency Missing = 85

WARNING: 75% of the data are missing.

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.37: Distribution of experience working with
Desert Shield casualties by sex. Comfort
survey respondents - corpsmen only, time 1.

Sex	Work with Desert Shield Casualty		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	69	19	88
	62.16	17.12	79.28
	78.41	21.59	
	83.13	67.86	
female	14	9	23
	12.61	8.11	20.72
	60.87	39.13	
	16.87	32.14	
Total	83	28	111
	74.77	25.23	100.00

Frequency Missing = 3

STATISTICS FOR TABLE OF Sex BY Worked w Desert Shield Casualty

Statistic	DF	Value	Prob
Chi-Square	1	2.974	0.085
Likelihood Ratio Chi-Square	1	2.780	0.095
Continuity Adj. Chi-Square	1	2.117	0.146
Mantel-Haenszel Chi-Square	1	2.947	0.086
Fisher's Exact Test (Left)			0.974
(Right)			0.076
(2-Tail)			0.107
Phi Coefficient		0.164	
Contingency Coefficient		0.162	
Cramer's V		0.164	

Effective Sample Size = 111

Frequency Missing = 3

Table B.38: Distribution of prior sea duty by sex.
Comfort survey respondents - corpsmen only, time 1.

Sex		Prior Sea Duty	
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	17	73	90
	14.91	64.04	78.95
	18.89	81.11	
	80.95	78.49	
female	4	20	24
	3.51	17.54	21.05
	16.67	83.33	
	19.05	21.51	
Total	21	93	114
	18.42	81.58	100.00

STATISTICS FOR TABLE OF Sex BY Prior Sea Duty

Statistic	DF	Value	Prob
Chi-Square	1	0.062	0.803
Likelihood Ratio Chi-Square	1	0.063	0.801
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.062	0.804
Fisher's Exact Test (Left)			0.697
(Right)			0.533
(2-Tail)			1.000
Phi Coefficient		0.023	
Contingency Coefficient		0.023	
Cramer's V		0.023	

Sample Size = 114

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.39: Distribution of prior isolated duty
by sex. Comfort survey respondents - corpsmen only, time 1.

Sex		Prior Isolated Duty		
Frequency	Percent	yes	no	Total
Row Pct	Col Pct			
male		5	85	90
	4.39		74.56	78.95
	5.56		94.44	
	55.56		80.95	
female		4	20	24
	3.51		17.54	21.05
	16.67		83.33	
	44.44		19.05	
Total		9	105	114
	7.89		92.11	100.00

STATISTICS FOR TABLE OF Sex BY Prior Isolated Duty			
Statistic	DF	Value	Prob
Chi-Square	1	3.217	0.073
Likelihood Ratio Chi-Square	1	2.724	0.099
Continuity Adj. Chi-Square	1	1.870	0.171
Mantel-Haenszel Chi-Square	1	3.189	0.074
Fisher's Exact Test (Left)			0.091
(Right)			0.981
(2-Tail)			0.091
Phi Coefficient		-0.168	
Contingency Coefficient		0.166	
Cramer's V		-0.168	

Sample Size = 114

WARNING: 25% of the cells have expected counts less
than 5. Chi-Square may not be a valid test.

Table B.40: Distribution of prior experience in the Middle East by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	Prior Experience in the Mid East		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	3	87	90
	2.63	76.32	78.95
	3.33	96.67	
	60.00	79.82	
female	2	22	24
	1.75	19.30	21.05
	8.33	91.67	
	40.00	20.18	
Total	5	109	114
	4.39	95.61	100.00

STATISTICS FOR TABLE OF Sex BY Prior Experience in the Mid East

Statistic	DF	Value	Prob
Chi-Square	1	1.130	0.288
Likelihood Ratio Chi-Square	1	0.971	0.324
Continuity Adj. Chi-Square	1	0.252	0.616
Mantel-Haenszel Chi-Square	1	1.120	0.290
Fisher's Exact Test (Left)			0.283
(Right)			0.938
(2-Tail)			0.283
Phi Coefficient		-0.100	
Contingency Coefficient		0.099	
Cramer's V		-0.100	

Sample Size = 114

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.41: Distribution of Experience participating in mass casualty or disasters by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	Participated in Mass Casualty/ Disasters		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	26 22.81 28.89 83.87	64 56.14 71.11 77.11	90 78.95
female	5 4.39 20.83 16.13	19 16.67 79.17 22.89	24 21.05
Total	31 27.19	83 72.81	114 100.00

STATISTICS FOR TABLE OF Sex BY Participation

Statistic	DF	Value	Prob
Chi-Square	1	0.621	0.431
Likelihood Ratio Chi-Square	1	0.647	0.421
Continuity Adj. Chi-Square	1	0.281	0.596
Mantel-Haenszel Chi-Square	1	0.616	0.433
Fisher's Exact Test (Left)			0.853
(Right)			0.305
(2-Tail)			0.606
Phi Coefficient		0.074	
Contingency Coefficient		0.074	
Cramer's V		0.074	

Sample Size = 114

Table B.42: Distribution of Experience working with dead bodies by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	Worked with Dead Bodies		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	56	34	90
	49.12	29.82	78.95
	62.22	37.78	
	87.50	68.00	
female	8	16	24
	7.02	14.04	21.05
	33.33	66.67	
	12.50	32.00	
Total	64	50	114
	56.14	43.86	100.00

STATISTICS FOR TABLE OF Sex BY Worked w Dead Bodies			
Statistic	DF	Value	Prob
Chi-Square	1	6.422	0.011
Likelihood Ratio Chi-Square	1	6.427	0.011
Continuity Adj. Chi-Square	1	5.302	0.021
Mantel-Haenszel Chi-Square	1	6.366	0.012
Fisher's Exact Test (Left)			0.997
(Right)			0.011
(2-Tail)			0.019
Phi Coefficient		0.237	
Contingency Coefficient		0.231	
Cramer's V		0.237	

Sample Size = 114

Table B.43: Distribution of Experience of patient death by sex. Comfort survey respondents - corpsmen only, time 1.

Sex		Ever Had a Patient Die		
Frequency	Percent	yes	no	Total
Row Pct	Col Pct			
male		51	39	90
	44.74		34.21	78.95
	56.67		43.33	
	80.95		76.47	
female		12	12	24
	10.53		10.53	21.05
	50.00		50.00	
	19.05		23.53	
Total		63	51	114
	55.26		44.74	100.00

STATISTICS FOR TABLE OF Sex BY Ever Had a Patient Die

Statistic	DF	Value	Prob
Chi-Square	1	0.341	0.559
Likelihood Ratio Chi-Square	1	0.339	0.560
Continuity Adj. Chi-Square	1	0.124	0.724
Mantel-Haenszel Chi-Square	1	0.338	0.561
Fisher's Exact Test (Left)			0.793
(Right)			0.361
(2-Tail)			0.646
Phi Coefficient		0.055	
Contingency Coefficient		0.055	
Cramer's V		0.055	

Sample Size = 114

Table B.44: Distribution of FMSS Operational Readiness Training by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	FMSS Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	18 18.56 23.38 90.00	59 60.82 76.62 76.62	77 79.38
female	2 2.06 10.00 10.00	18 18.56 90.00 23.38	20 20.62
Total	20 20.62	77 79.38	97 100.00

Frequency Missing = 17

STATISTICS FOR TABLE OF Sex BY FMSS Operational Readiness Tng

Statistic	DF	Value	Prob
Chi-Square	1	1.736	0.188
Likelihood Ratio Chi-Square	1	1.972	0.160
Continuity Adj. Chi-Square	1	1.015	0.314
Mantel-Haenszel Chi-Square	1	1.718	0.190
Fisher's Exact Test (Left)			0.957
(Right)			0.157
(2-Tail)			0.231
Phi Coefficient		0.134	
Contingency Coefficient		0.133	
Cramer's V		0.134	

Effective Sample Size = 97

Frequency Missing = 17

WARNING: 15% of the data are missing.

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.45: Distribution of ACLS Operational Readiness Training by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	ACLS Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	18	58	76
	18.56	59.79	78.35
	23.68	76.32	
	69.23	81.69	
female	8	13	21
	8.25	13.40	21.65
	38.10	61.90	
	30.77	18.31	
Total	26	71	97
	26.80	73.20	100.00

Frequency Missing = 17

STATISTICS FOR TABLE OF Sex BY ACLS Operational Readiness Tng

Statistic	DF	Value	Prob
Chi-Square	1	1.742	0.187
Likelihood Ratio Chi-Square	1	1.655	0.198
Continuity Adj. Chi-Square	1	1.085	0.298
Mantel-Haenszel Chi-Square	1	1.724	0.189
Fisher's Exact Test (Left)			0.149
(Right)			0.942
(2-Tail)			0.265
Phi Coefficient		-0.134	
Contingency Coefficient		0.133	
Cramer's V		-0.134	

Effective Sample Size = 97

Frequency Missing = 17

WARNING: 15% of the data are missing.

Table B.46: Distribution of ATLS Operational Readiness Training by sex.
Comfort survey respondents - corpsmen only, time 1.

Sex	ATLS Operational Readiness Tng		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	9 9.57 12.16 64.29	65 69.15 87.84 81.25	74 78.72
female	5 5.32 25.00 35.71	15 15.96 75.00 18.75	20 21.28
Total	14 14.89	80 85.11	94 100.00

Frequency Missing = 20

STATISTICS FOR TABLE OF Sex BY ATLS ORT

Statistic	DF	Value	Prob
Chi-Square	1	2.047	0.152
Likelihood Ratio Chi-Square	1	1.847	0.174
Continuity Adj. Chi-Square	1	1.160	0.282
Mantel-Haenszel Chi-Square	1	2.025	0.155
Fisher's Exact Test (Left)			0.141
(Right)			0.957
(2-Tail)			0.168
Phi Coefficient		-0.148	
Contingency Coefficient		0.146	
Cramer's V		-0.148	

Effective Sample Size = 94

Frequency Missing = 20

WARNING: 18% of the data are missing.

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.47: Distribution of C4 Operational Readiness
Training by sex. Comfort survey respondents - corpsmen only,
time 1.

Sex	C4 Operational Readiness Tng		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	15	58	73
	16.13	62.37	78.49
	20.55	79.45	
	78.95	78.38	
female	4	16	20
	4.30	17.20	21.51
	20.00	80.00	
	21.05	21.62	
Total	19	74	93
	20.43	79.57	100.00

Frequency Missing = 21

STATISTICS FOR TABLE OF Sex BY C4 Oper Read Tng

Statistic	DF	Value	Prob
Chi-Square	1	0.003	0.957
Likelihood Ratio Chi-Square	1	0.003	0.957
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.003	0.957
Fisher's Exact Test (Left)			0.630
(Right)			0.615
(2-Tail)			1.000
Phi Coefficient		0.006	
Contingency Coefficient		0.006	
Cramer's V		0.006	

Effective Sample Size = 93

Frequency Missing = 21

WARNING: 18% of the data are missing.

WARNING: 25% of the cells have expected counts less
than 5. Chi-Square may not be a valid test.

Table B.48: Distribution of Damage Control Operational Readiness Training by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	Damage Control Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	45 45.00 56.25 90.00	35 35.00 43.75 70.00	80 80.00
female	5 5.00 25.00 10.00	15 15.00 75.00 30.00	20 20.00
Total	50 50.00	50 50.00	100 100.00

Frequency Missing = 14

STATISTICS FOR TABLE OF Sex BY Damage Control OR Tng

Statistic	DF	Value	Prob
Chi-Square	1	6.250	0.012
Likelihood Ratio Chi-Square	1	6.486	0.011
Continuity Adj. Chi-Square	1	5.063	0.024
Mantel-Haenszel Chi-Square	1	6.187	0.013
Fisher's Exact Test (Left)			0.997
(Right)			0.011
(2-Tail)			0.023
Phi Coefficient		0.250	
Contingency Coefficient		0.243	
Cramer's V		0.250	

Effective Sample Size = 100

Frequency Missing = 14

WARNING: 12% of the data are missing.

Table B.49: Distribution of shipboard orientation by sex.
Comfort survey respondents - corpsmen only, time 1.

Sex	Shipboard Orientation		
	Operational Readiness		
	yes	no	Total
	Frequency	Frequency	Frequency
Percent	Percent	Percent	Percent
Row Pct	Row Pct	Row Pct	Row Pct
Col Pct	Col Pct	Col Pct	Col Pct
male	70	13	83
	66.04	12.26	78.30
	84.34	15.66	
	78.65	76.47	
female	19	4	23
	17.92	3.77	21.70
	82.61	17.39	
	21.35	23.53	
Total	89	17	106
	83.96	16.04	100.00

Frequency Missing = 8

STATISTICS FOR TABLE OF Sex BY Shipboard Orientation

Statistic	DF	Value	Prob
Chi-Square	1	0.040	0.842
Likelihood Ratio Chi-Square	1	0.039	0.843
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.040	0.842
Fisher's Exact Test (Left)			0.709
(Right)			0.531
(2-Tail)			1.000
Phi Coefficient		0.019	
Contingency Coefficient		0.019	
Cramer's V		0.019	

Effective Sample Size = 106

Frequency Missing = 8

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.50: Distribution of MMART Team experience readiness training by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	MMART Team Experience		
	Operational Readiness Tng		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	9	65	74
	9.68	69.89	79.57
	12.16	87.84	
	90.00	78.31	
female	1	18	19
	1.08	19.35	20.43
	5.26	94.74	
	10.00	21.69	
Total	10	83	93
	10.75	89.25	100.00

Frequency Missing = 21

STATISTICS FOR TABLE OF Sex BY MMART Team

Statistic	DF	Value	Prob
Chi-Square	1	0.750	0.387
Likelihood Ratio Chi-Square	1	0.868	0.352
Continuity Adj. Chi-Square	1	0.203	0.652
Mantel-Haenszel Chi-Square	1	0.742	0.389
Fisher's Exact Test (Left)			0.911
(Right)			0.349
(2-Tail)			0.681
Phi Coefficient		0.090	
Contingency Coefficient		0.089	
Cramer's V		0.090	

Effective Sample Size = 93

Frequency Missing = 21

WARNING: 18% of the data are missing.

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.51: Distribution of RADMUF Operational readiness training by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	RADMUF Operational Readiness Tng		
	yes	no	Total
Frequency			
Percent			
Row Pct			
Col Pct			
male	2 2.13 2.67 50.00	73 77.66 97.33 81.11	75 79.79
female	2 2.13 10.53 50.00	17 18.09 89.47 18.89	19 20.21
Total	4 4.26	90 95.74	94 100.00

Frequency Missing = 20

STATISTICS FOR TABLE OF Sex BY RADMUF Tng

Statistic	DF	Value	Prob
Chi-Square	1	2.299	0.129
Likelihood Ratio Chi-Square	1	1.853	0.173
Continuity Adj. Chi-Square	1	0.774	0.379
Mantel-Haenszel Chi-Square	1	2.274	0.132
Fisher's Exact Test (Left)			0.181
(Right)			0.975
(2-Tail)			0.181
Phi Coefficient		-0.156	
Contingency Coefficient		0.154	
Cramer's V		-0.156	

Effective Sample Size = 94

Frequency Missing = 20

WARNING: 18% of the data are missing.

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.52: Distribution of MEDSTAR Operational readiness training by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	MEDSTAR Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	2 2.15 2.70 100.00	72 77.42 97.30 79.12	74 79.57
female	0 0.00 0.00 0.00	19 20.43 100.00 20.88	19 20.43
Total	2 2.15	91 97.85	93 100.00

Frequency Missing = 21

STATISTICS FOR TABLE OF Sex BY MEDSTAR Readiness Tng

Statistic	DF	Value	Prob
Chi-Square	1	0.525	0.469
Likelihood Ratio Chi-Square	1	0.925	0.336
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.519	0.471
Fisher's Exact Test (Left)			1.000
(Right)			0.631
(2-Tail)			1.000
Phi Coefficient		0.075	
Contingency Coefficient		0.075	
Cramer's V		0.075	

Effective Sample Size = 93

Frequency Missing = 21

WARNING: 18% of the data are missing.

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.53: Distribution of IDT Operational Readiness Training by sex. Comfort survey respondents- corpsmen only, time 1.

Sex	IDT Operational Readiness Training		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	4	70	74
	4.30	75.27	79.57
	5.41	94.59	
	100.00	78.65	
female	0	19	19
	0.00	20.43	20.43
	0.00	100.00	
	0.00	21.35	
Total	4	89	93
	4.30	95.70	100.00

Frequency Missing = 21

STATISTICS FOR TABLE OF Sex BY IDT ORT

Statistic	DF	Value	Prob
Chi-Square	1	1.073	0.300
Likelihood Ratio Chi-Square	1	1.874	0.171
Continuity Adj. Chi-Square	1	0.162	0.688
Mantel-Haenszel Chi-Square	1	1.062	0.303
Fisher's Exact Test (Left)			1.000
(Right)			0.394
(2-Tail)			0.578
Phi Coefficient		0.107	
Contingency Coefficient		0.107	
Cramer's V		0.107	

Effective Sample Size = 93

Frequency Missing = 21

WARNING: 18% of the data are missing.

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.54: Distribution of hours of sleep by sex.
Comfort survey respondents - corpsmen only, time 1.

Sex

Hours of Sleep

Frequency Percent Row Pct Col Pct	3-5 hrs	6-9 hrs	10-12 hr s	Total
male	16 15.24 19.28 64.00	60 57.14 72.29 83.33	7 6.67 8.43 87.50	83 79.05
female	9 8.57 40.91 36.00	12 11.43 54.55 16.67	1 0.95 4.55 12.50	22 20.95
Total	25 23.81	72 68.57	8 7.62	105 100.00

Frequency Missing = 9

STATISTICS FOR TABLE OF Sex BY Hours of Sleep

Statistic	DF	Value	Prob
Chi-Square	2	4.561	0.102
Likelihood Ratio Chi-Square	2	4.218	0.121
Mantel-Haenszel Chi-Square	1	3.894	0.048
Phi Coefficient		0.208	
Contingency Coefficient		0.204	
Cramer's V		0.208	

Effective Sample Size = 105

Frequency Missing = 9

Table B.55: Distribution of self-reported weight status by sex. Comfort survey respondents - corpsmen only, time 1.

Sex		Self-Reported Weight Status			
Frequency	Percent	gained w t	lost wt	stayed s ame	Total
Row Pct	Col Pct				
male		32	25	27	84
		29.91	23.36	25.23	78.50
		38.10	29.76	32.14	
		84.21	71.43	79.41	
female		6	10	7	23
		5.61	9.35	6.54	21.50
		26.09	43.48	30.43	
		15.79	28.57	20.59	
Total		38	35	34	107
		35.51	32.71	31.78	100.00

Frequency Missing = 7

STATISTICS FOR TABLE OF Sex BY Self-Reported Weight Status

Statistic	DF	Value	Prob
Chi-Square	2	1.788	0.409
Likelihood Ratio Chi-Square	2	1.774	0.412
Mantel-Haenszel Chi-Square	1	0.283	0.595
Phi Coefficient		0.129	
Contingency Coefficient		0.128	
Cramer's V		0.129	

Effective Sample Size = 107

Frequency Missing = 7

Table B.56: Distribution of those receiving an annual physical on board by sex. Comfort survey respondents - corpsmen only, time 1.

Sex		Annual Physical on Board		
Frequency	Percent			
Row Pct	Col Pct	yes	no	Total
male		1	85	86
		0.91	77.27	78.18
		1.16	98.84	
		20.00	80.95	
female		4	20	24
		3.64	18.18	21.82
		16.67	83.33	
		80.00	19.05	
Total		5	105	110
		4.55	95.45	100.00

Frequency Missing = 4

STATISTICS FOR TABLE OF Sex BY Annual Physical on Board

Statistic	DF	Value	Prob
Chi-Square	1	10.395	0.001
Likelihood Ratio Chi-Square	1	8.156	0.004
Continuity Adj. Chi-Square	1	7.129	0.008
Mantel-Haenszel Chi-Square	1	10.300	0.001
Fisher's Exact Test (Left)			7.81E-03
(Right)			1.000
(2-Tail)			7.81E-03
Phi Coefficient		-0.307	
Contingency Coefficient		0.294	
Cramer's V		-0.307	

Effective Sample Size = 110

Frequency Missing = 4

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.57: Distribution of those requiring care for physical problems by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	On Board Medical Care for Physical Problems		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	45 40.18 51.14 73.77	43 38.39 48.86 84.31	88 78.57
female	16 14.29 66.67 26.23	8 7.14 33.33 15.69	24 21.43
Total	61 54.46	51 45.54	112 100.00

Frequency Missing = 2

STATISTICS FOR TABLE OF Sex BY Medical Tx for Physical Problems

Statistic	DF	Value	Prob
Chi-Square	1	1.834	0.176
Likelihood Ratio Chi-Square	1	1.870	0.171
Continuity Adj. Chi-Square	1	1.261	0.261
Mantel-Haenszel Chi-Square	1	1.818	0.178
Fisher's Exact Test (Left)			0.130
(Right)			0.945
(2-Tail)			0.248
Phi Coefficient		-0.128	
Contingency Coefficient		0.127	
Cramer's V		-0.128	

Effective Sample Size = 112
Frequency Missing = 2

Table B.58 : Distribution of those treated for emotional problems by sex. Comfort survey respondents - corpsmen only, time 1.

Sex	On Board Medical Care for Emotional Problems		
	yes	no	Total
Frequency			
Percent			
Row Pct			
Col Pct			
male	6 5.45 6.98 66.67	80 72.73 93.02 79.21	86 78.18
female	3 2.73 12.50 33.33	21 19.09 87.50 20.79	24 21.82
Total	9 8.18	101 91.82	110 100.00

Frequency Missing = 4

STATISTICS FOR TABLE OF Sex BY Care for Emotional Problems

Statistic	DF	Value	Prob
Chi-Square	1	0.762	0.383
Likelihood Ratio Chi-Square	1	0.694	0.405
Continuity Adj. Chi-Square	1	0.204	0.651
Mantel-Haenszel Chi-Square	1	0.755	0.385
Fisher's Exact Test (Left)			0.307
(Right)			0.898
(2-Tail)			0.406
Phi Coefficient		-0.083	
Contingency Coefficient		0.083	
Cramer's V		-0.083	

Effective Sample Size = 110

Frequency Missing = 4

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.59: Distribution of those needing but not seeking medical care on board. Comfort survey respondents - corpsmen only, time 1.

Sex	Medical Care Needed But Not Obtained		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	8 7.48 9.30 72.73	78 72.90 90.70 81.25	86 80.37
female	3 2.80 14.29 27.27	18 16.82 85.71 18.75	21 19.63
Total	11 10.28	96 89.72	107 100.00

Frequency Missing = 7

STATISTICS FOR TABLE OF Sex BY No Care Obtained

Statistic	DF	Value	Prob
Chi-Square	1	0.454	0.500
Likelihood Ratio Chi-Square	1	0.422	0.516
Continuity Adj. Chi-Square	1	0.075	0.785
Mantel-Haenszel Chi-Square	1	0.450	0.502
Fisher's Exact Test (Left)			0.369
(Right)			0.858
(2-Tail)			0.448
Phi Coefficient		-0.065	
Contingency Coefficient		0.065	
Cramer's V		-0.065	

Effective Sample Size = 107

Frequency Missing = 7

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.60: Distribution of age by sex. Comfort survey
respondents - nurses only, time 1.

Sex	Age (years)		Total
	18-25	26-55 me d splt	
	Frequency		
	Percent		
Row Pct			
Col Pct			
male	1 1.23 6.67 4.17	14 17.28 93.33 24.56	15 18.52
female	23 28.40 34.85 95.83	43 53.09 65.15 75.44	66 81.48
Total	24 29.63	57 70.37	81 100.00

Frequency Missing = 2

STATISTICS FOR TABLE OF Sex BY Age (in years)

Statistic	DF	Value	Prob
Chi-Square	1	4.656	0.031
Likelihood Ratio Chi-Square	1	5.760	0.016
Continuity Adj. Chi-Square	1	3.402	0.065
Mantel-Haenszel Chi-Square	1	4.598	0.032
Fisher's Exact Test (Left)			0.025
(Right)			0.997
(2-Tail)			0.032
Phi Coefficient		-0.240	
Contingency Coefficient		0.233	
Cramer's V		-0.240	

Effective Sample Size = 81

Frequency Missing = 2

WARNING: 25% of the cells have expected counts less
than 5. Chi-Square may not be a valid test.

Table B.61: Distribution of race/ethnic background by sex.
Comfort survey respondents - nurses only, time 1.

Sex		Race/Ethnic background				
Frequency	Percent					
Row Pct	Col Pct	white	black	hispanic	other	Total
male		11	1	3	0	15
		13.75	1.25	3.75	0.00	18.75
		73.33	6.67	20.00	0.00	
		15.94	16.67	75.00	0.00	
female		58	5	1	1	65
		72.50	6.25	1.25	1.25	81.25
		89.23	7.69	1.54	1.54	
		84.06	83.33	25.00	100.00	
Total		69	6	4	1	80
		86.25	7.50	5.00	1.25	100.00

Frequency Missing = 3

STATISTICS FOR TABLE OF Sex BY Race/Ethnic background

Statistic	DF	Value	Prob
Chi-Square	3	8.913	0.030
Likelihood Ratio Chi-Square	3	6.765	0.080
Mantel-Haenszel Chi-Square	1	4.307	0.038
Phi Coefficient		0.334	
Contingency Coefficient		0.317	
Cramer's V		0.334	

Effective Sample Size = 80

Frequency Missing = 3

WARNING: 75% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.62: Distribution of education by sex. Comfort survey respondents - nurses only, time 1.

Sex		Education			
Frequency	Percent				
Row Pct	Col Pct	some college	bachelor degree	other	Total
male		2	12	1	15
		2.41	14.46	1.20	18.07
		13.33	80.00	6.67	
		25.00	19.67	7.14	
female		6	49	13	68
		7.23	59.04	15.66	81.93
		8.82	72.06	19.12	
		75.00	80.33	92.86	
Total		8	61	14	83
		9.64	73.49	16.87	100.00

STATISTICS FOR TABLE OF Sex BY Education

Statistic	DF	Value	Prob
Chi-Square	2	1.494	0.474
Likelihood Ratio Chi-Square	2	1.740	0.419
Mantel-Haenszel Chi-Square	1	1.344	0.246
Phi Coefficient		0.134	
Contingency Coefficient		0.133	
Cramer's V		0.134	

Sample Size = 83

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.63: Distribution of Marital status by sex. Comfort survey respondents - nurses only, time 1.

Sex		Marital Status					
Frequency							
Percent							
Row Pct							
Col Pct							
	nev marr	single +	married	sep/div	div+ rem		Total
	ied	sig oth	only onc	+ not r	ar/sig o		
male	3	0	9	1	2		15
	3.66	0.00	10.98	1.22	2.44		18.29
	20.00	0.00	60.00	6.67	13.33		
	6.67	0.00	36.00	50.00	25.00		
female	42	2	16	1	6		67
	51.22	2.44	19.51	1.22	7.32		81.71
	62.69	2.99	23.88	1.49	8.96		
	93.33	100.00	64.00	50.00	75.00		
Total	45	2	25	2	8		82
	54.88	2.44	30.49	2.44	9.76		100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Marital Status

Statistic	DF	Value	Prob
Chi-Square	4	11.348	0.023
Likelihood Ratio Chi-Square	4	11.547	0.021
Mantel-Haenszel Chi-Square	1	6.961	0.008
Phi Coefficient		0.372	
Contingency Coefficient		0.349	
Cramer's V		0.372	

Effective Sample Size = 82

Frequency Missing = 1

WARNING: 60% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.64: Distribution of parental status by sex. Comfort survey respondents - nurses only, time 1.

Sex		Have Children	
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	9	6	15
	10.84	7.23	18.07
	60.00	40.00	
	36.00	10.34	
female	16	52	68
	19.28	62.65	81.93
	23.53	76.47	
	64.00	89.66	
Total	25	58	83
	30.12	69.88	100.00

STATISTICS FOR TABLE OF Sex BY Have Children

Statistic	DF	Value	Prob
Chi-Square	1	7.766	0.005
Likelihood Ratio Chi-Square	1	7.181	0.007
Continuity Adj. Chi-Square	1	6.130	0.013
Mantel-Haenszel Chi-Square	1	7.672	0.006
Fisher's Exact Test (Left)			0.999
(Right)			8.20E-03
(2-Tail)			0.011
Phi Coefficient		0.306	
Contingency Coefficient		0.293	
Cramer's V		0.306	

Sample Size = 83

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.65: Distribution of number of children by sex.
Comfort survey respondents - nurses only, time 1.

Sex		Number of Children			
Frequency	Percent				
Row Pct	Col Pct	1	2	3	Total
male		3	5	1	9
		12.00	20.00	4.00	36.00
		33.33	55.56	11.11	
		27.27	50.00	25.00	
female		8	5	3	16
		32.00	20.00	12.00	64.00
		50.00	31.25	18.75	
		72.73	50.00	75.00	
Total		11	10	4	25
		44.00	40.00	16.00	100.00

Frequency Missing = 58

STATISTICS FOR TABLE OF Sex BY Number of Children

Statistic	DF	Value	Prob
Chi-Square	2	1.424	0.491
Likelihood Ratio Chi-Square	2	1.418	0.492
Mantel-Haenszel Chi-Square	1	0.086	0.769
Phi Coefficient		0.239	
Contingency Coefficient		0.232	
Cramer's V		0.239	

Effective Sample Size = 25

Frequency Missing = 58

WARNING: 70% of the data are missing.

WARNING: 67% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.66: Distribution of experience working with
Desert Shield casualties by sex. Comfort
survey respondents - nurses only, time 1.

Sex	Work with Desert Shield Casualty		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	13 15.85 86.67 20.63	2 2.44 13.33 10.53	15 18.29
female	50 60.98 74.63 79.37	17 20.73 25.37 89.47	67 81.71
Total	63 76.83	19 23.17	82 100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Worked w Desert Shield Casualty

Statistic	DF	Value	Prob
Chi-Square	1	0.998	0.318
Likelihood Ratio Chi-Square	1	1.101	0.294
Continuity Adj. Chi-Square	1	0.436	0.509
Mantel-Haenszel Chi-Square	1	0.986	0.321
Fisher's Exact Test (Left)			0.916
(Right)			0.263
(2-Tail)			0.501
Phi Coefficient		0.110	
Contingency Coefficient		0.110	
Cramer's V		0.110	

Effective Sample Size = 82

Frequency Missing = 1

WARNING: 25% of the cells have expected counts less
than 5. Chi-Square may not be a valid test.

Table B.67: Distribution of prior sea duty by sex.
Comfort survey respondents - nurses only, time 1.

Sex		Prior Sea Duty	
Frequency	Percent		
Row Pct	Col Pct	yes	no
Col Pct			Total
male	5	10	15
	6.10	12.20	18.29
	33.33	66.67	
	100.00	12.99	
female	0	67	67
	0.00	81.71	81.71
	0.00	100.00	
	0.00	87.01	
Total	5	77	82
	6.10	93.90	100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Prior Sea Duty

Statistic	DF	Value	Prob
Chi-Square	1	23.784	0.000
Likelihood Ratio Chi-Square	1	18.566	0.000
Continuity Adj. Chi-Square	1	18.318	0.000
Mantel-Haenszel Chi-Square	1	23.494	0.000
Fisher's Exact Test (Left)			1.000
(Right)			1.10E-04
(2-Tail)			1.10E-04
Phi Coefficient		0.539	
Contingency Coefficient		0.474	
Cramer's V		0.539	

Effective Sample Size = 82

Frequency Missing = 1

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.68: Distribution of prior isolated duty
by sex. Comfort survey respondents - nurses only, time 1.

Sex		Prior Isolated Duty		
Frequency	Percent			
Row Pct	Col Pct	yes	no	Total
male		3	12	15
		3.70	14.81	18.52
		20.00	80.00	
		42.86	16.22	
female		4	62	66
		4.94	76.54	81.48
		6.06	93.94	
		57.14	83.78	
Total		7	74	81
		8.64	91.36	100.00

Frequency Missing = 2

STATISTICS FOR TABLE OF Sex BY Prior Isolated Duty			
Statistic	DF	Value	Prob
Chi-Square	1	3.008	0.083
Likelihood Ratio Chi-Square	1	2.465	0.116
Continuity Adj. Chi-Square	1	1.502	0.220
Mantel-Haenszel Chi-Square	1	2.971	0.085
Fisher's Exact Test (Left)			0.980
(Right)			0.114
(2-Tail)			0.114
Phi Coefficient		0.193	
Contingency Coefficient		0.189	
Cramer's V		0.193	

Effective Sample Size = 81

Frequency Missing = 2

WARNING: 25% of the cells have expected counts less
than 5. Chi-Square may not be a valid test.

Table B.69: Distribution of prior experience in the Middle East by sex. Comfort survey respondents - nurses only, time 1.

Sex	Prior Experience in the Mid East		
Frequency Percent Row Pct Col Pct	yes	no	Total
male	2 2.44 13.33 50.00	13 15.85 86.67 16.67	15 18.29
female	2 2.44 2.99 50.00	65 79.27 97.01 83.33	67 81.71
Total	4 4.88	78 95.12	82 100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Prior Experience in Mid East

Statistic	DF	Value	Prob
Chi-Square	1	2.829	0.093
Likelihood Ratio Chi-Square	1	2.199	0.138
Continuity Adj. Chi-Square	1	1.038	0.308
Mantel-Haenszel Chi-Square	1	2.794	0.095
Fisher's Exact Test (Left)			0.982
(Right)			0.151
(2-Tail)			0.151
Phi Coefficient		0.186	
Contingency Coefficient		0.183	
Cramer's V		0.186	

Effective Sample Size = 82

Frequency Missing = 1

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.70: Distribution of Experience participating in mass casualty or disasters by sex. Comfort survey respondents - nurses only, time 1.

Sex	Participated in Mass Casualty/ Disasters		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	9	6	15
	10.98	7.32	18.29
	60.00	40.00	
	36.00	10.53	
female	16	51	67
	19.51	62.20	81.71
	23.88	76.12	
	64.00	89.47	
Total	25	57	82
	30.49	69.51	100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Participation

Statistic	DF	Value	Prob
Chi-Square	1	7.545	0.006
Likelihood Ratio Chi-Square	1	7.000	0.008
Continuity Adj. Chi-Square	1	5.937	0.015
Mantel-Haenszel Chi-Square	1	7.453	0.006
Fisher's Exact Test (Left)			0.998
(Right)			9.00E-03
(2-Tail)			0.011
Phi Coefficient		0.303	
Contingency Coefficient		0.290	
Cramer's V		0.303	

Effective Sample Size = 82

Frequency Missing = 1

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.71: Distribution of Experience working with dead bodies by sex. Comfort survey respondents - nurses only, time 1.

Sex	Worked with Dead Bodies		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	15	0	15
	18.07	0.00	18.07
	100.00	0.00	
	19.74	0.00	
female	61	7	68
	73.49	8.43	81.93
	89.71	10.29	
	80.26	100.00	
Total	76	7	83
	91.57	8.43	100.00

STATISTICS FOR TABLE OF Sex BY Worked w Dead Bodies

Statistic	DF	Value	Prob
Chi-Square	1	1.686	0.194
Likelihood Ratio Chi-Square	1	2.930	0.087
Continuity Adj. Chi-Square	1	0.617	0.432
Mantel-Haenszel Chi-Square	1	1.666	0.197
Fisher's Exact Test (Left)			1.000
(Right)			0.233
(2-Tail)			0.341
Phi Coefficient		0.143	
Contingency Coefficient		0.141	
Cramer's V		0.143	

Sample Size = 83

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.72: Distribution of Experience of patient death by sex. Comfort survey respondents - nurses only, time 1.

Sex		Ever Had a Patient Die		
Frequency	Percent	yes	no	Total
Row Pct	Col Pct			
male	15	0	15	
	18.07	0.00	18.07	
	100.00	0.00		
	19.48	0.00		
female	62	6	68	
	74.70	7.23	81.93	
	91.18	8.82		
	80.52	100.00		
Total	77	6	83	
	92.77	7.23	100.00	

STATISTICS FOR TABLE OF Sex BY Ever Had a Patient Die

Statistic	DF	Value	Prob
Chi-Square	1	1.427	0.232
Likelihood Ratio Chi-Square	1	2.493	0.114
Continuity Adj. Chi-Square	1	0.414	0.520
Mantel-Haenszel Chi-Square	1	1.409	0.235
Fisher's Exact Test (Left)			1.000
(Right)			0.290
(2-Tail)			0.586
Phi Coefficient		0.131	
Contingency Coefficient		0.130	
Cramer's V		0.131	

Sample Size = 83

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.73: Distribution of FMSS Operational Readiness Training by sex. Comfort survey respondents - nurses only, time 1.

Sex	FMSS Operational Readiness Training		
	yes	no	Total
	Frequency	Frequency	Frequency
	Percent	Percent	Percent
Row Pct	Col Pct	Col Pct	
male	3	10	13
	4.17	13.89	18.06
	23.08	76.92	
	75.00	14.71	
female	1	58	59
	1.39	80.56	81.94
	1.69	98.31	
	25.00	85.29	
Total	4	68	72
	5.56	94.44	100.00

Frequency Missing = 11

STATISTICS FOR TABLE OF Sex BY FMSS Operational Readiness Tng

Statistic	DF	Value	Prob
Chi-Square	1	9.282	0.002
Likelihood Ratio Chi-Square	1	6.713	0.010
Continuity Adj. Chi-Square	1	5.654	0.017
Mantel-Haenszel Chi-Square	1	9.153	0.002
Fisher's Exact Test (Left)			0.999
(Right)			0.017
(2-Tail)			0.017
Phi Coefficient		0.359	
Contingency Coefficient		0.338	
Cramer's V		0.359	

Effective Sample Size = 72

Frequency Missing = 11

WARNING: 13% of the data are missing.

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.74: Distribution of ACLS Operational Readiness Training by sex. Comfort survey respondents - nurses only, time 1.

Sex	ACLS Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	7 8.86 53.85 15.91	6 7.59 46.15 17.14	13 16.46
female	37 46.84 56.06 84.09	29 36.71 43.94 82.86	66 83.54
Total	44 55.70	35 44.30	79 100.00

Frequency Missing = 4

STATISTICS FOR TABLE OF Sex BY ACLS Operational Readiness Tng

Statistic	DF	Value	Prob
Chi-Square	1	0.022	0.883
Likelihood Ratio Chi-Square	1	0.022	0.883
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.021	0.884
Fisher's Exact Test (Left)			0.560
(Right)			0.676
(2-Tail)			1.000
Phi Coefficient		-0.017	
Contingency Coefficient		0.017	
Cramer's V		-0.017	

Effective Sample Size = 79

Frequency Missing = 4

Table B.75: Distribution of ATLS Operational Readiness Training by sex. Comfort survey respondents - nurses only, time 1.

Sex	ATLS Operational Readiness Tng		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	3 4.00 25.00 12.00	9 12.00 75.00 18.00	12 16.00
female	22 29.33 34.92 88.00	41 54.67 65.08 82.00	63 84.00
Total	25 33.33	50 66.67	75 100.00

Frequency Missing = 8

STATISTICS FOR TABLE OF Sex BY ATLS ORT

Statistic	DF	Value	Prob
Chi-Square	1	0.446	0.504
Likelihood Ratio Chi-Square	1	0.465	0.495
Continuity Adj. Chi-Square	1	0.112	0.738
Mantel-Haenszel Chi-Square	1	0.440	0.507
Fisher's Exact Test (Left)			0.379
(Right)			0.842
(2-Tail)			0.740
Phi Coefficient		-0.077	
Contingency Coefficient		0.077	
Cramer's V		-0.077	

Effective Sample Size = 75

Frequency Missing = 8

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.76: Distribution of C4 Operational Readiness Training by sex. Comfort survey respondents - nurses only, time 1.

Sex	C4 Operational Readiness Training		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	2 2.74 16.67 15.38	10 13.70 83.33 16.67	12 16.44
female	11 15.07 18.03 84.62	50 68.49 81.97 83.33	61 83.56
Total	13 17.81	60 82.19	73 100.00

Frequency Missing = 10

STATISTICS FOR TABLE OF Sex BY C4 Oper Read Tng

Statistic	DF	Value	Prob
Chi-Square	1	0.013	0.910
Likelihood Ratio Chi-Square	1	0.013	0.909
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.013	0.911
Fisher's Exact Test (Left)			0.638
(Right)			0.682
(2-Tail)			1.000
Phi Coefficient		-0.013	
Contingency Coefficient		0.013	
Cramer's V		-0.013	

Effective Sample Size = 73

Frequency Missing = 10

WARNING: 12% of the data are missing.

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.77: Distribution of Damage Control Operational Readiness Training by sex. Comfort survey respondents - nurses only, time 1.

Sex	Damage Control Operational Readiness Training		
Frequency Percent Row Pct Col Pct	yes	no	Total
male	9 12.33 69.23 33.33	4 5.48 30.77 8.70	13 17.81
female	18 24.66 30.00 66.67	42 57.53 70.00 91.30	60 82.19
Total	27 36.99	46 63.01	73 100.00

Frequency Missing = 10

STATISTICS FOR TABLE OF Sex BY Damage Control OR Tng

Statistic	DF	Value	Prob
Chi-Square	1	7.056	0.008
Likelihood Ratio Chi-Square	1	6.845	0.009
Continuity Adj. Chi-Square	1	5.473	0.019
Mantel-Haenszel Chi-Square	1	6.959	0.008
Fisher's Exact Test (Left)			0.998
(Right)			0.011
(2-Tail)			0.012
Phi Coefficient		0.311	
Contingency Coefficient		0.297	
Cramer's V		0.311	

Effective Sample Size = 73

Frequency Missing = 10

WARNING: 12% of the data are missing.

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.78: Distribution of shipboard orientation by sex.
Comfort survey respondents - nurses only, time 1.

Sex	Shipboard Orientation Operational Readiness		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	11 13.92 84.62 17.19	2 2.53 15.38 13.33	13 16.46
female	53 67.09 80.30 82.81	13 16.46 19.70 86.67	66 83.54
Total	64 81.01	15 18.99	79 100.00

Frequency Missing = 4

STATISTICS FOR TABLE OF Sex BY Shipboard Orientation

Statistic	DF	Value	Prob
Chi-Square	1	0.131	0.717
Likelihood Ratio Chi-Square	1	0.137	0.711
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.130	0.719
Fisher's Exact Test (Left)			0.764
(Right)			0.532
(2-Tail)			1.000
Phi Coefficient		0.041	
Contingency Coefficient		0.041	
Cramer's V		0.041	

Effective Sample Size = 79

Frequency Missing = 4

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.79: Distribution of MMART Team experience readiness training by sex. Comfort survey respondents - nurses only, time 1.

Sex	MMART Team Experience		
	Operational Readiness Tng		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	1	10	11
	1.41	14.08	15.49
	9.09	90.91	
	25.00	14.93	
female	3	57	60
	4.23	80.28	84.51
	5.00	95.00	
	75.00	85.07	
Total	4	67	71
	5.63	94.37	100.00

Frequency Missing = 12

STATISTICS FOR TABLE OF Sex BY MMART Team

Statistic	DF	Value	Prob
Chi-Square	1	0.293	0.589
Likelihood Ratio Chi-Square	1	0.258	0.612
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.289	0.591
Fisher's Exact Test (Left)			0.889
(Right)			0.498
(2-Tail)			0.498
Phi Coefficient		0.064	
Contingency Coefficient		0.064	
Cramer's V		0.064	

Effective Sample Size = 71

Frequency Missing = 12

WARNING: 14% of the data are missing.

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.80: Distribution of RADMUF Operational readiness training by sex. Comfort survey respondents - nurses only, time 1.

Sex		RADMUF		
		Operational Readiness Tng		
Frequency	Percent	yes	no	Total
Row Pct	Col Pct			
male		1	10	11
		1.37	13.70	15.07
		9.09	90.91	
		14.29	15.15	
female		6	56	62
		8.22	76.71	84.93
		9.68	90.32	
		85.71	84.85	
Total		7	66	73
		9.59	90.41	100.00

Frequency Missing = 10

STATISTICS FOR TABLE OF Sex BY RADMUF Tng

Statistic	DF	Value	Prob
Chi-Square	1	0.004	0.951
Likelihood Ratio Chi-Square	1	0.004	0.951
Continuity Adj. Chi-Square	1	0.000	1.000
Mantel-Haenszel Chi-Square	1	0.004	0.952
Fisher's Exact Test (Left)			0.717
(Right)			0.698
(2-Tail)			1.000
Phi Coefficient		-0.007	
Contingency Coefficient		0.007	
Cramer's V		-0.007	

Effective Sample Size = 73

Frequency Missing = 10

WARNING: 12% of the data are missing.

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.81: Distribution of MEDSTAR Operational readiness training by sex. Comfort survey respondents - nurses only, time 1.

Frequency Percent Row Pct Col Pct	MEDSTAR Operational Readiness Training		Total
	yes	no	
	-----	-----	
	-----	-----	
male	1	10	11
	1.43	14.29	15.71
	9.09	90.91	
	50.00	14.71	
female	1	58	59
	1.43	82.86	84.29
	1.69	98.31	
	50.00	85.29	
Total	2	68	70
	2.86	97.14	100.00

Frequency Missing = 13

STATISTICS FOR TABLE OF Sex BY MEDSTAR Operational Tng

Statistic	DF	Value	Prob
Chi-Square	1	1.827	0.176
Likelihood Ratio Chi-Square	1	1.324	0.250
Continuity Adj. Chi-Square	1	0.134	0.714
Mantel-Haenszel Chi-Square	1	1.801	0.180
Fisher's Exact Test (Left)			0.977
(Right)			0.292
(2-Tail)			0.292
Phi Coefficient		0.162	
Contingency Coefficient		0.159	
Cramer's V		0.162	

Effective Sample Size = 70

Frequency Missing = 13

WARNING: 16% of the data are missing.

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.82: Distribution of IDT Operational Readiness Training by sex. Comfort survey respondents. time 1.

Sex	IDT Operational Readiness Training	
Frequency		
Percent		
Row Pct		
Col Pct	no	Total
male	11	11
	15.71	15.71
	100.00	
	15.71	
female	59	59
	84.29	84.29
	100.00	
	84.29	
Total	70	70
	100.00	100.00

Frequency Missing = 13

Table B.83: Distribution of hours of sleep by sex.
Comfort survey respondents - nurses only, time 1.

Sex		Hours of Sleep			
Frequency					
Percent					
Row Pct					
Col Pct	3-5 hrs	6-9 hrs	10-12 hr s		Total
male	2 2.44 13.33 22.22	13 15.85 86.67 18.84	0 0.00 0.00 0.00		15 18.29
female	7 8.54 10.45 77.78	56 68.29 83.58 81.16	4 4.88 5.97 100.00		67 81.71
Total	9 10.98	69 84.15	4 4.88		82 100.00

Frequency Missing = 1

STATISTICS FOR TABLE OF Sex BY Hours of Sleep

Statistic	DF	Value	Prob
Chi-Square	2	1.002	0.606
Likelihood Ratio Chi-Square	2	1.718	0.424
Mantel-Haenszel Chi-Square	1	0.613	0.434
Phi Coefficient		0.111	
Contingency Coefficient		0.110	
Cramer's V		0.111	

Effective Sample Size = 82

Frequency Missing = 1

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.84: Distribution of self-reported weight status by sex. Comfort survey respondents - nurses only, time 1.

Sex		Self-Reported Weight Status			
Frequency	Percent	gained w t	lost wt	stayed s ame	Total
Row Pct	Col Pct				
Col Pct					
male	6	1	6	13	
	7.50	1.25	7.50	16.25	
	46.15	7.69	46.15		
	20.00	6.67	17.14		
female	24	14	29	67	
	30.00	17.50	36.25	83.75	
	35.82	20.90	43.28		
	80.00	93.33	82.86		
Total	30	15	35	80	
	37.50	18.75	43.75	100.00	

Frequency Missing = 3

STATISTICS FOR TABLE OF Sex BY WEIGHTT1

Statistic	DF	Value	Prob
Chi-Square	2	1.343	0.511
Likelihood Ratio Chi-Square	2	1.565	0.457
Mantel-Haenszel Chi-Square	1	0.074	0.786
Phi Coefficient		0.130	
Contingency Coefficient		0.128	
Cramer's V		0.130	

Effective Sample Size = 80

Frequency Missing = 3

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.85: Distribution of those receiving an annual physical on board by sex. Comfort survey respondents - nurses only, time 1.

Sex	Annual Physical on Board		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	1	12	13
	1.25	15.00	16.25
	7.69	92.31	
	33.33	15.58	
female	2	65	67
	2.50	81.25	83.75
	2.99	97.01	
	66.67	84.42	
Total	3	77	80
	3.75	96.25	100.00

Frequency Missing = 3

STATISTICS FOR TABLE OF Sex BY Annual Physical on Board

Statistic	DF	Value	Prob
Chi-Square	1	0.668	0.414
Likelihood Ratio Chi-Square	1	0.550	0.458
Continuity Adj. Chi-Square	1	0.000	0.984
Mantel-Haenszel Chi-Square	1	0.660	0.417
Fisher's Exact Test (Left)			0.933
(Right)			0.417
(2-Tail)			0.417
Phi Coefficient		0.091	
Contingency Coefficient		0.091	
Cramer's V		0.091	

Effective Sample Size = 80

Frequency Missing = 3

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.86: Distribution of those requiring care for physical problems by sex. Comfort survey respondents - nurses only, time 1.

Sex	On Board Medical Care for Physical Problems		Total
	yes	no	
Frequency			
Percent			
Row Pct			
Col Pct			
male	9 10.84 60.00 16.36	6 7.23 40.00 21.43	15 18.07
female	46 55.42 67.65 83.64	22 26.51 32.35 78.57	68 81.93
Total	55 66.27	28 33.73	83 100.00

STATISTICS FOR TABLE OF Sex		BY Medical Tng for Physical Problems	
Statistic	DF	Value	Prob
Chi-Square	1	0.321	0.571
Likelihood Ratio Chi-Square	1	0.315	0.575
Continuity Adj. Chi-Square	1	0.070	0.791
Mantel-Haenszel Chi-Square	1	0.318	0.573
Fisher's Exact Test (Left)			0.388
(Right)			0.809
(2-Tail)			0.562
Phi Coefficient		-0.062	
Contingency Coefficient		0.062	
Cramer's V		-0.062	

Sample Size = 83

Table B.87 : Distribution of those treated for emotional problems by sex. Comfort survey respondents - nurses only, time 1.

Sex	On Board Medical Care for Emotional Problems		
Frequency			
Percent			
Row Pct			
Col Pct	yes	no	Total
male	0	13	13
	0.00	16.25	16.25
	0.00	100.00	
	0.00	17.81	
female	7	60	67
	8.75	75.00	83.75
	10.45	89.55	
	100.00	82.19	
Total	7	73	80
	8.75	91.25	100.00

Frequency Missing = 3

STATISTICS FOR TABLE OF Sex BY Care for Emotional Problems

Statistic	DF	Value	Prob
Chi-Square	1	1.488	0.222
Likelihood Ratio Chi-Square	1	2.610	0.106
Continuity Adj. Chi-Square	1	0.468	0.494
Mantel-Haenszel Chi-Square	1	1.470	0.225
Fisher's Exact Test (Left)			0.274
(Right)			1.000
(2-Tail)			0.592
Phi Coefficient		-0.136	
Contingency Coefficient		0.135	
Cramer's V		-0.136	

Effective Sample Size = 80

Frequency Missing = 3

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.88: Distribution of those needing but not seeking medical care on board. Comfort survey respondents - nurses only, time 1.

Sex	Medical Care Needed But Not Obtained		
Frequency Percent Row Pct Col Pct	yes	no	Total
male	3 3.90 21.43 27.27	11 14.29 78.57 16.67	14 18.18
female	8 10.39 12.70 72.73	55 71.43 87.30 83.33	63 81.82
Total	11 14.29	66 85.71	77 100.00

Frequency Missing = 6

STATISTICS FOR TABLE OF Sex BY No Care Obtained

Statistic	DF	Value	Prob
Chi-Square	1	0.713	0.398
Likelihood Ratio Chi-Square	1	0.652	0.419
Continuity Adj. Chi-Square	1	0.178	0.673
Mantel-Haenszel Chi-Square	1	0.704	0.402
Fisher's Exact Test (Left)			0.893
(Right)			0.318
(2-Tail)			0.410
Phi Coefficient		0.096	
Contingency Coefficient		0.096	
Cramer's V		0.096	

Effective Sample Size = 77

Frequency Missing = 6

WARNING: 25% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Table B.89: Means, standard errors and t-tests for differences between the sexes on social field stress. Comfort survey respondents, time 1.

Stress experienced by:

Self

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	135	4.91851852	0.13751802	-5.7485	241.9	0.0001
female	109	5.99082569	0.12603322			

Significant Other

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	6.72932331	0.09127325	0.9530	199.6	0.3418
female	107	6.57943925	0.12808519			

Children

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	129	6.73643411	0.17419505	-3.5532	217.0	0.0005
female	105	7.48571429	0.11884231			

Supervisor

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	130	4.73076923	0.16769099	-4.0778	236.0	.0001
female	108	5.71296296	0.17054213			

Coworker

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	131	4.78625954	0.15016438	-3.9613	237	.0001
female	108	5.67592593	0.16735512			

Table B.90: Means, standard errors, and t-tests for differences between the sexes on SCL-90 subscales. Comfort survey respondents. time 1.

SCL-90 Somatization

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	123	0.43181818	0.04899577	-0.8090	224.0	.4194
female	103	0.49374816	0.05979842			

SCL-90 Depression

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	121	0.86167620	0.06385352	-1.9973	223.0	.0470
female	104	1.06354783	0.07979557			

SCL-90 Anxiety

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	121	0.51818182	0.05777934	-2.3717	223.0	.0186
female	104	0.73557692	0.07250864			

SCL-90 Hostility

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	121	0.83608815	0.07621035	1.1884	224.0	.2359
female	105	0.70793651	0.07541032			

Table B.91: Means, standard errors and t-tests for differences between the sexes on perceived social support. Comfort survey respondents, time 1.

Perceived support from significant other

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	97	17.69397721	0.43040206	1.3100	169.0	.1920
female	74	16.76813656	0.58022046			

Perceived support from friends

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	129	14.72174623	0.37133029	-4.0522	233.0	.0001
female	106	16.85600794	0.36517243			

Table B.92: Means, standard errors and t-tests for differences between the sexes on Comfort-specific stress perception. Comfort survey respondents, time 1.

Heat stress

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	136	5.02205882	0.14814279	-.5932	245.0	.5536
female	111	5.15315315	0.16399906			

Separation from Family

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	137	5.63503650	0.13222504	-0.6272	246.0	0.5311
female	111	5.75675676	0.14090861			

Fear of Fire

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	131	2.56488550	0.13188156	-2.5647	239.0	0.0109
female	110	3.10000000	0.16486656			

Fear of Terrorist Attack

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	2.83458647	0.13123511	-3.2115	242.0	0.0015
female	111	3.49549550	0.16131822			

Fear of Ship Sinking

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	2.37593985	0.12923240	-2.9931	213.3	0.0031
female	111	3.01801802	0.17122289			

Fear of Dying

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	2.90977444	0.14807131	-2.6270	242.0	0.0092
female	111	3.52252252	0.18362393			

Fear of Others' Deaths

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	3.57894737	0.16369318	-4.2960	242.0	0.0000
female	111	4.62162162	0.17920292			

Fear of Combat Casualties

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	136	3.66911765	0.16831057	-4.4026	244.9	0.0001
female	111	4.67567568	0.15473004			

Fear of the Unknown

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	136	4.45588235	0.18103661	-4.8511	244.9	0.0001
female	111	5.63063063	0.16083725			

Table B.93: Means, standard errors and t-tests for differences between the sexes on helpfulness of stress reducers, Comfort survey respondents, time 1.

Helpfulness of:

Gym

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	126	5.09523810	0.16307699	2.4948	223.0	0.0133
female	99	4.44444444	0.20866719			

Movies

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	4.62406015	0.13228175	4.0724	234.0	0.0001
female	103	3.76699029	0.16740018			

Eating

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	3.33834586	0.14155309	-1.4936	236.0	0.1366
female	105	3.66666667	0.17046944			

Weather Decks

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	134	4.64179104	0.14732226	-3.9677	241.0	0.0001
female	109	5.46788991	0.14312232			

Lounges

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	3.66917293	0.15046136	0.8005	237.0	0.4242
female	106	3.49056604	0.16376373			

Reading

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	4.76691729	0.14552144	-1.0042	240.0	0.3163
female	109	4.99082569	0.17069316			

Time Alone

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	131	5.50381679	0.15792773	-1.1201	231.0	0.2638
female	102	5.75490196	0.15290894			

Library

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	126	3.51587302	0.14853106	1.4679	225.0	0.1435
female	101	3.18811881	0.16692494			

With Friend

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	135	5.64444444	0.11871184	0.4155	242.0	0.6782
female	109	5.56880734	0.13939275			

Reading Mail

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	135	6.37037037	0.10761022	0.8698	241.0	0.3853
female	108	6.23148148	0.11737766			

Writing Mail

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	133	5.66165414	0.13538264	2.2908	239.0	0.0228
female	108	5.20370370	0.14635248			

Table B.94: Means, standard errors and t-tests for differences between the sexes on Ways of Coping subscales, Comfort survey respondents, time 1.

Confrontive Coping

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	118	1.09604520	0.05084343	1.9611	220.0	0.0511
female	104	0.94551282	0.05794674			

Distancing

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	118	1.27542373	0.04927473	1.3341	216.0	0.1836
female	100	1.18166667	0.04946941			

Self Control

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	120	1.38809524	0.04981482	-0.4483	221.0	0.6544
female	103	1.42024965	0.05124075			

Seeking Social Support

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	119	1.29551821	0.04954480	-1.2253	220.0	0.2218
female	103	1.38673139	0.0559135			

Accepting Responsibility

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	122	1.03893443	0.05739428	2.9696	224.0	0.0033
female	104	0.77403846	0.06929706			

Escape Avoidance

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	117	1.06730769	0.05457488	-0.8817	219.0	0.3789
female	104	1.13701923	0.05712306			

Planful Problem Solving

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	121	1.59779614	0.05181395	1.6692	222.0	0.0965
female	103	1.46925566	0.05710824			

Positive Reappraisal

Sex	N	Mean	Std Error	T	DF	Prob>|T|
male	119	1.42136855	0.05235082	-0.7479	216.0	0.4553
female	99	1.48340548	0.06565778			

Table B.95: Least square means, t-tests and p-values for stressors by sex, occupation and sex by occupation interactions for nurses and all other respondents, Comfort study, time 1.

<u>Construct</u>	<u>Subgroup</u>	<u>Lsmeans</u>	<u>T-test</u>	<u>P-value</u>
Sex Effects				
Injury Factor	Males	2.65244709	-2.70175	0.0074
	Females	3.30637255		
Work demands Factor	Males	3.62830688	-4.87997	0.0001
	Females	4.90736551		
Heat stress	Males	5.13690476	-0.15777	0.8748
	Females	5.18495475		
Separation from Family	Males	5.88955026	0.785404	0.4330
	Females	5.67929864		
Occupation Effects				
Injury Factor	Others	3.12268519	1.183908	0.2377
	Nurses	2.83613445		
Work demands Factor	Others	4.37250712	0.798698	0.4253
	Nurses	4.16316527		
Heat Stress	Others	5.15064103	-0.06757	0.9462
	Nurses	5.17121849		
Separation from Family	Others	5.51317664	-2.02651	0.0439
	Nurses	6.05567227		

Sex by Occupation Interaction

Injury Factor

Sex	Occupation	MINJSTS Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Others	2.66203704	1	.	0.048527	-3.54427	-1.70554
					0.9613	0.0005	0.0895
Male	Nurses	2.64285714	2	-0.04853	.	-2.16944	-0.94659

				0.9613		-0.0311	0.3449
Female	Others	3.58333333	3	3.544267	2.169441	.	1.981914
				0.0005	0.0311		0.0487
Female	Nurses	3.02941176	4	1.705536	0.946595	-1.98191	.
				0.0895	0.3449	0.0487	

Trauma-related work demands Factor

Sex	Occupation	MWRKSTS Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	4.01851852	1	.	1.823382	-2.51511	-4.58596
					0.0696	0.0126	0.0001
Male	Nurses	3.23809524	2	-1.82338	.	-3.17051	-4.18377
				0.0696		0.0017	0.0001
Female	Others	4.72649573	3	2.515106	3.170514	.	-1.19521
				0.0126	0.0017		0.2333
Female	Nurses	5.08823529	4	4.585961	4.183769	1.195205	.
				0.0001	0.0001	0.2333	

Heat Stress

Sex	Occupation	HEASTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	4.91666667	1	.	-0.8857	-1.43071	-0.25321
					0.3767	0.1539	0.8003
Male	Nurses	5.35714286	2	0.885698	.	-0.05036	0.723678
				0.3767		0.9599	0.4700
Female	Others	5.38461538	3	1.430708	0.050364	.	1.135493
				0.1539	0.9599		0.2574
Female	Nurses	4.98529412	4	0.253207	-0.72368	-1.13549	.
				0.8003	0.4700	0.2574	

Separation from Family

Sex	Occupation	SFMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	5.56481481	1	.	-1.48571	0.359224	-1.39459
					0.1388	0.7198	0.1645
Male	Nurses	6.21428571	2	1.485711	.	1.569951	0.70236
				0.1388		0.1178	0.4832
Female	Others	5.46153846	3	-0.35922	-1.56995	.	-1.40891
				0.7198	0.1178		0.1602
Female	Nurses	5.89705882	4	1.394587	-0.70236	1.408905	.
				0.1645	0.4832	0.1602	

Table B.96: Least square means, t-test, and p-values for stress reducers by sex, occupation, and sex by occupation interactions for nurses and all other respondents, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Effects				
Gym	Males	5.09239130	1.11062	0.2682
	Females	4.67444444		
Movies	Males	4.60869565	2.333608	0.0207
	Females	3.87148148		
Eating	Males	3.75543478	0.145811	0.8842
	Females	3.70666667		
Weather Decks	Males	4.90217391	-1.27821	0.2028
	Females	5.30407407		
Lounges	Males	3.58333333	0.396638	0.6921
	Females	3.44814815		
Reading	Males	4.51449275	-1.16236	0.2467
	Females	4.91037037		
Time Alone	Males	5.82246377	0.416766	0.6774
	Females	5.68629630		
Library	Males	3.54347826	1.045917	0.2970
	Females	3.21333333		
With Friends	Males	5.59420290	0.276481	0.7825
	Females	5.52111111		
Reading Mail	Males	6.54347826	2.203989	0.0288
	Females	6.03333333		
Writing Mail	Males	5.64855072	1.336234	0.1832
	Females	5.25259259		
Occupation				
Gym	Others	5.03683575	0.815362	0.4160
	Nurses	4.73000000		
Movies	Others	4.34017713	0.633649	0.5271
	Nurses	4.14000000		
Eating	Others	3.29710145	-2.59492	0.0103
	Nurses	4.16500000		
Weather Decks	Others	4.85124799	-1.60214	0.1109
	Nurses	5.35500000		

Lounges	Others	3.52314815	0.043467	0.9654
	Nurses	3.50833333		
Reading	Others	4.71819646	0.033853	0.9730
	Nurses	4.70666667		
Time Alone	Others	5.53542673	-1.3403	0.1819
	Nurses	5.97333333		
Library	Others	3.62681159	1.573927	0.1173
	Nurses	3.13000000		
With Friends	Others	5.49698068	-0.45904	0.6468
	Nurses	5.61833333		
Reading Mail	Others	6.00181159	-2.47636	0.0142
	Nurses	6.57500000		
Writing Mail	Others	5.40780998	-0.28861	0.7732
	Nurses	5.49333333		

Sex by Occupation Interactions

Gym

Sex	Occupation	GYMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	Pr > |T|			
				1	2	3	4
Male	Others	5.18478261	1	.	0.311083	0.698531	2.131524
					0.7561	0.4858	0.0344
Male	Nurses	5.00000000	2	-0.31108	.	0.16548	0.868003
				0.7561		0.8688	0.3866
Female	Others	4.88888889	3	-0.69853	-0.16548	.	0.927928
				0.4858	0.8688		0.3547
Female	Nurses	4.46000000	4	-2.13152	-0.868	-0.92793	.
				0.0344	0.3866	0.3547	

Movies

Sex	Occupation	MOVSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	Pr > |T|			
				1	2	3	4
Male	Others	4.71739130	1	.	0.435961	2.121572	3.283924
					0.6634	0.0353	0.0012
Male	Nurses	4.50000000	2	-0.43596	.	0.952756	1.378636
				0.6634		0.3420	0.1697
Female	Others	3.96296296	3	-2.12157	-0.95276	.	0.471544
				0.0353	0.3420		0.6378
Female	Nurses	3.78000000	4	-3.28392	-1.37864	-0.47154	.
				0.0012	0.1697	0.6378	

Eating

Sex	Occupation	EATSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Others	3.26086957	1	.	-1.87361 0.0626	-0.19248 0.8476	-2.71048 0.0074
Male	Nurses	4.25000000	2	1.873612 0.0626	.	1.536066 0.1263	0.307459 0.7589
Female	Others	3.33333333	3	0.192478 0.8476	-1.53607 0.1263	.	-1.81763 0.0708
Female	Nurses	4.08000000	4	2.710478 0.0074	-0.30746 0.7589	1.817634 0.0708	.

Weather Decks

Sex	Occupation	WDSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Others	4.55434783	1	.	-1.40167 0.1628	-1.67776 0.0952	-3.18774 0.0017
Male	Nurses	5.25000000	2	1.401675 0.1628	.	0.18155 0.8561	-0.404 0.6867
Female	Others	5.14814815	3	1.677761 0.0952	-0.18155 0.8561	.	-0.80753 0.4204
Female	Nurses	5.46000000	4	3.187744 0.0017	0.404005 0.6867	0.807527 0.4204	.

Lounges

Sex	Occupation	LNGSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Others	3.75000000	1	.	0.619605 0.5363	1.182614 0.2385	0.487074 0.6268
Male	Nurses	3.41666667	2	-0.61961 0.5363	.	0.197938 0.8433	-0.32538 0.7453
Female	Others	3.29629630	3	-1.18261 0.2385	-0.19794 0.8433	.	-0.7255 0.4691
Female	Nurses	3.60000000	4	-0.48707 0.6268	0.325379 0.7453	0.725505 0.4691	.

Reading

Sex	Occupation	REASTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Others	4.69565217	1	.	0.673971 0.5012	-0.11761 0.9065	-1.24894 0.2133
Male	Nurses	4.33333333	2	-0.67397 0.5012	.	-0.67043 0.5035	-1.32614 0.1865
Female	Others	4.74074074	3	0.117612 0.9065	0.670427 0.5035	.	-0.81103 0.4184
Female	Nurses	5.08000000	4	1.248941	1.32614	0.811028	.

0.2133 0.1865 0.4184

Time Alone

Sex	Occupation	TASTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	5.47826087	1	.	-1.33486 0.1836	-0.31088 0.7563	-1.02209 0.3081
Male	Nurses	6.16666667	2	1.334858 0.1836	.	0.984761 0.3261	0.715878 0.4750
Female	Others	5.59259259	3	0.310879 0.7563	-0.98476 0.3261	.	-0.46701 0.6411
Female	Nurses	5.78000000	4	1.022089 0.3081	-0.71588 0.4750	0.467015 0.6411	.

Library

Sex	Occupation	LIBSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	3.58695652	1	.	0.174528 0.8616	-0.22434 0.8227	2.899435 0.0042
Male	Nurses	3.50000000	2	-0.17453 0.8616	.	-0.29593 0.7676	1.418102 0.1579
Female	Others	3.66666667	3	0.224343 0.8227	0.295927 0.7676	.	2.33865 0.0205
Female	Nurses	2.76000000	4	-2.89944 0.0042	-1.4181 0.1579	-2.33865 0.0205	.

With Friends

Sex	Occupation	SFSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	5.77173913	1	.	0.850912 0.3960	1.846645 0.0665	-0.20204 0.8401
Male	Nurses	5.41666667	2	-0.85091 0.3960	.	0.412226 0.6807	-0.92288 0.3573
Female	Others	5.22222222	3	-1.84664 0.0665	-0.41223 0.6807	.	-1.84103 0.0673
Female	Nurses	5.82000000	4	0.202037 0.8401	0.922877 0.3573	1.841032 0.0673	.

Reading Mail

Sex	Occupation	RMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	6.33695652	1	.	-1.13053 0.2598	2.57267 0.0109	-0.30144 0.7634
Male	Nurses	6.75000000	2	1.130532	.	2.62314	0.914675

				0.2598		0.0095	0.3616
Female	Others	5.66666667	3	-2.57267	-2.62314	.	-2.57954
				0.0109	0.0095		0.0107
Female	Nurses	6.40000000	4	0.301435	-0.91468	2.579539	.
				0.7634	0.3616	0.0107	

Writing Mail

Sex	Occupation	WMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	5.63043478	1	.	-0.07746	1.33488	1.159422
					0.9383	0.1836	0.2478
Male	Nurses	5.66666667	2	0.077463	.	0.91066	0.707666
				0.9383		0.3637	0.4801
Female	Others	5.18518519	3	-1.33488	-0.91066	.	-0.37042
				0.1836	0.3637		0.7115
Female	Nurses	5.32000000	4	-1.15942	-0.70767	0.370421	.
				0.2478	0.4801	0.7115	

Time B.97: Least square means, t-tests, and p-values for social field stress by sex, occupation and sex by occupation interactions for nurses, and all other respondents, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
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Sex Effects

Self	Males	5.22339744	-2.97608	0.0033
	Females	5.96790541		
Significant Other	Males	6.76089744	0.848819	0.3969
	Females	6.58994932		
Children	Males	6.74615385	-2.58971	0.0103
	Females	7.50823480		
Supervisor	Males	5.37371795	-0.80982	0.4189
	Females	5.62880068		
Coworkers	Males	5.22692308	-1.01221	0.3126
	Females	5.52850507		

Occupation effects

Self	Others	5.36213617	-1.86689	0.0633
	Nurses	5.82916667		
Significant Other	Others	6.71855509	0.428329	0.6688
	Nurses	6.63229167		
Children	Others	7.14345114	0.110488	0.9121
	Nurses	7.11093750		
Supervisor	Others	4.91606029	-3.7157	0.0003
	Nurses	6.08645833		
Coworkers	Others	4.89449064	-3.24373	0.0014
	Nurses	5.86093750		

Sex by Occupation Interaction

Self

Sex	Occupation	STYOUT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	/	Pr >	|T|	
			1	2	3	4	

Male	Others	4.91346154	1	.	-1.54699 0.1233	-3.23123 0.0014	-5.25638 0.0001
Male	Nurses	5.53333333	2	1.546993 0.1233	.	-0.62484 0.5327	-1.42166 0.1566
Female	Others	5.81081081	3	3.231225 0.0014	0.624842 0.5327	.	-1.04862 0.2955
Female	Nurses	6.12500000	4	5.256383 0.0001	1.421664 0.1566	1.048622 0.2955	.

Significant Others

Sex	Occupation	STSSOT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	6.78846154	1	.	0.170898 0.8645	0.625359 0.5324	1.38617 0.1671
Male	Nurses	6.73333333	2	-0.1709 0.8645	.	0.236877 0.8130	0.603152 0.5470
Female	Others	6.64864865	3	-0.62536 0.5324	-0.23688 0.8130	.	0.486707 0.6270
Female	Nurses	6.53125000	4	-1.38617 0.1671	-0.60315 0.5470	-0.48671 0.6270	.

Children

Sex	Occupation	STCHLDT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	6.69230769	1	.	-0.22848 0.8195	-2.76201 0.0062	-2.69086 0.0077
Male	Nurses	6.80000000	2	0.228479 0.8195	.	-1.52112 0.1297	-1.27028 0.2054
Female	Others	7.59459459	3	2.762014 0.0062	1.521121 0.1297	.	0.490055 0.6246
Female	Nurses	7.42187500	4	2.690857 0.0077	1.270277 0.2054	-0.49006 0.6246	.

Supervisor

Sex	Occupation	STSUPT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	4.48076923	1	.	-3.53977 0.0005	-2.4897 0.0135	-4.91183 0.0001
Male	Nurses	6.26666667	2	3.539773 0.0005	.	1.636989 0.1031	0.687792 0.4923
Female	Others	5.35135135	3	2.489705 0.0135	-1.63699 0.1031	.	-1.47087 0.1428
Female	Nurses	5.90625000	4	4.911832 0.0001	-0.68779 0.4923	1.470869 0.1428	.

Coworkers

Sex	Occupation	STCOWT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	4.65384615	1	.	-2.40172	-1.45514	-4.61925
					0.0172	0.1471	0.0001
Male	Nurses	5.80000000	2	2.401717	.	1.257095	-0.24588
				0.0172		0.2101	0.8060
Female	Others	5.13513514	3	1.455137	-1.2571	.	-2.20471
				0.1471	0.2101		0.0285
Female	Nurses	5.92187500	4	4.619247	0.245882	2.20471	.
				0.0001	0.8060	0.0285	

Table B.98: Least square means, t-tests and p-values for SCL-90 subscales by sex, occupation, and sex by occupation interactions for nurses and all others, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Effects				
Somatization	Male	0.43897627	-0.63968	0.5231
	Females	0.50375406		
Depression	Males	0.82425140	-1.73281	0.0846
	Females	1.05367588		
Anxiety	Males	0.50107490	-1.84395	0.0666
	Females	0.72060268		
Hostility	Males	0.79131993	0.413997	0.6793
	Females	0.73385417		

Occupation Effects

Somatization	Others	0.50526415	0.669506	0.5039
	Nurses	0.43746618		
Depression	Others	0.99018546	0.773742	0.4399
	Nurses	0.88774182		
Anxiety	Others	0.65750347	0.783931	0.4340
	Nurses	0.56417411		
Hostility	Others	0.89012945	1.837694	0.0675
	Nurses	0.63504464		

Sex by Occupation Interactions

Somatization

Sex	Occupation	SOMT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	0.43152398	1	.	-0.09146	-1.31762	0.033169
					0.9272	0.1891	0.9736
Male	Nurses	0.44642857	2	0.091464	.	-0.73283	0.106195
					0.9272	0.4645	0.9155
Female	Others	0.57900433	3	1.317617	0.732835	.	1.251372
					0.1891	0.4645	0.2122
Female	Nurses	0.42850379	4	-0.03317	-0.10619	-1.25137	.
					0.9736	0.9155	0.2122

Depression

Sex	Occupation	DEPT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	0.89575554	1	.	0.671222	-1.29053	-1.06661
					0.5028	0.1983	0.2874
Male	Nurses	0.75274725	2	-0.67122	.	-1.40308	-1.2234
				0.5028		0.1621	0.2225
Female	Others	1.08461538	3	1.29053	1.403075	.	0.393519
				0.1983	0.1621		0.6943
Female	Nurses	1.02273638	4	1.066606	1.2234	-0.39352	.
				0.2874	0.2225	0.6943	

Anxiety

Sex	Occupation	ANXT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	0.53786408	1	.	0.384064	-1.81836	-1.17888
					0.7013	0.0704	0.2398
Male	Nurses	0.46428571	2	-0.38406	.	-1.47099	-1.00674
				0.7013		0.1428	0.3152
Female	Others	0.77714286	3	1.818364	1.470989	.	0.799755
				0.0704	0.1428		0.4247
Female	Nurses	0.66406250	4	1.178875	1.006735	-0.79976	.
				0.2398	0.3152	0.4247	

Hostility

Sex	Occupation	HOST1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	0.88025890	1	.	0.796351	-0.12867	2.504166
					0.4267	0.8977	0.0130
Male	Nurses	0.70238095	2	-0.79635	.	-0.79693	0.582074
				0.4267		0.4264	0.5611
Female	Others	0.90000000	3	0.12867	0.796932	.	2.015665
				0.8977	0.4264		0.0451
Female	Nurses	0.56770833	4	-2.50417	-0.58207	-2.01567	.
				0.0130	0.5611	0.0451	

Table B.99: Least square means, t-tests, and p-values for perceived social support by sex, occupation, and sex by occupation interactions for nurses and all other respondents, Comfort study, time 1.

Construct	Subgroup	lsmeans	t-test	p-value
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Sex Effects:

Perceived Social Support - Spouse/ Significant Other	Males	17.0514748	0.688426	0.4922
	Females	16.4367068		
Perceived Social Support- Friend	Males	16.0762001	-0.92809	0.3548
	Females	16.7343458		

Occupation Effects:

Perceived Social Support - Spouse/ Significant Other	Others	16.8401653	0.21517	0.8299
	Nurses	16.6480163		
Perceived Social Support - Friend	Others	15.1446525	-3.55535	0.0005
	Nurses	17.6658935		

Sex by Occupation Interactions:

Perceived Social Support - Spouse/ Significant Others

Sex	Occupation	PSS-SSO Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	17.8886640	1	.	1.239166	1.929786	0.938704
					0.2171	0.0554	0.3493
Male	Nurses	16.2142857	2	-1.23917 0.2171	.	0.269951 0.7875	-0.61201 0.5414
					-1.92979 0.0554	-0.26995 0.7875	-1.10459 0.2710
Female	Others	15.7916667	3	-1.92979 0.0554	-0.26995	.	-1.10459 0.2710
					0.612007 0.5414	1.104589 0.2710	.
Female	Nurses	17.0817469	4	-0.9387 0.3493	0.612007 0.5414	1.104589 0.2710	.

Perceived Social Support - Friend

Sex	Occupation	PSS-Frnd Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	14.5809717	1	.	-2.78699	-1.30646	-4.65764
					0.0060	0.1933	0.0001
Male	Nurses	17.5714286	2	2.786994	.	1.498629	-0.16785

				0.0060		0.1360	0.8669
Female	Others	15.7083333	3	1.306463	-1.49863	.	-2.21253
				0.1933	0.1360		0.0284
Female	Nurses	17.7603583	4	4.657637	0.167853	2.21253	.
				0.0001	0.8669	0.0284	

Table B.100: Least square means, t-tests, and p-values for SCL-90 subscales by sex, occupation, and sex by occupation interactions for nurses and all other respondents, Comfort study, time 1.

Construct	Subgroup	lsmeans	t-test	p-value
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Sex Effects:

Somatization	Males	0.43897627	-0.63968	0.5231
	Females	0.50375406		
Depression	Males	0.82425140	-1.73281	0.0846
	Females	1.05367588		
Anxiety	Males	0.50107490	-1.84395	0.0666
	Females	0.72060268		
Hostility	Males	0.79131993	0.413997	0.6793
	Females	0.73385417		

Occupation Effects:

Somatization	Others	0.50526415	0.669506	0.5039
	Nurses	0.43746618		
Depression	Others	0.99018546	0.773742	0.4399
	Nurses	0.88774182		
Anxiety	Others	0.65750347	0.783931	0.4340
	Nurses	0.56417411		
Hostility	Others	0.89012945	1.837694	0.0675
	Nurses	0.63504464		

Sex by Occupation Interaction:

Somatization

Sex	Occupation	Somatiz Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	0.43152398	1	.	-0.09146	-1.31762	0.033169
					0.9272	0.1891	0.9736
Male	Nurses	0.44642857	2	0.091464	.	-0.73283	0.106195
				0.9272		0.4645	0.9155
Female	Others	0.57900433	3	1.317617	0.732835	.	1.251372
				0.1891	0.4645		0.2122
Female	Nurses	0.42850379	4	-0.03317	-0.10619	-1.25137	.
				0.9736	0.9155	0.2122	

Depression

Sex	Occupation	Depress Lsmean	T for H0: Lsmean(i)=Lsmean(j) / i/j	1	2	3	Pr > |T| 4
Male	Others	0.89575554	1	.	0.671222	-1.29053	-1.06661
					0.5028	0.1983	0.2874
Male	Nurses	0.75274725	2	-0.67122	.	-1.40308	-1.2234
				0.5028		0.1621	0.2225
Female	Others	1.08461538	3	1.29053	1.403075	.	0.393519
				0.1983	0.1621		0.6943
Female	Nurses	1.02273638	4	1.066606	1.2234	-0.39352	.
				0.2874	0.2225	0.6943	

Anxiety

Sex	Occupation	Anxiety Lsmean	T for H0: Lsmean(i)=Lsmean(j) / i/j	1	2	3	Pr > |T| 4
Male	Others	0.53786408	1	.	0.384064	-1.81836	-1.17888
					0.7013	0.0704	0.2398
Male	Nurses	0.46428571	2	-0.38406	.	-1.47099	-1.00674
				0.7013		0.1428	0.3152
Female	Others	0.77714286	3	1.818364	1.470989	.	0.799755
				0.0704	0.1428		0.4247
Female	Nurses	0.66406250	4	1.178875	1.006735	-0.79976	.
				0.2398	0.3152	0.4247	

Hostility

Sex	Occupation	Hostili Lsmean	T for H0: Lsmean(i)=Lsmean(j) / i/j	1	2	3	Pr > |T| 4
Male	Others	0.88025890	1	.	0.796351	-0.12867	2.504166
					0.4267	0.8977	0.0130
Male	Nurses	0.70238095	2	-0.79635	.	-0.79693	0.582074
				0.4267		0.4264	0.5611
Female	Others	0.90000000	3	0.12867	0.796932	.	2.015665
				0.8977	0.4264		0.0451
Female	Nurses	0.56770833	4	-2.50417	-0.58207	-2.01567	.
				0.0130	0.5611	0.0451	

Table B.101: Least square means, t-tests and p-values for Ways of Coping subscales by sex, occupation, and sex by occupation interactions for nurses and all other respondents, Comfort study, time 1.

Construct	Subgroup	lsmeans	t-test	p-value
Sex Effects:				
Confrontive Coping	Males	1.02472527	0.906264	0.3659
	Females	0.93392946		
Distancing	Males	1.18223443	0.01983	0.9842
	Females	1.18036927		
Self Control	Males	1.33281005	-0.87989	0.3800
	Females	1.41927471		
Seeking Social Support	Males	1.27197802	-0.52356	0.6012
	Females	1.32285974		
Accepting Responsibility	Males	0.92582418	1.192495	0.2345
	Females	0.78017884		
Escape Avoidance	Males	1.01167582	-1.46655	0.1441
	Females	1.16977149		
Planful Problem Solving	Males	1.59523810	1.615416	0.1078
	Females	1.42867197		
Positive Reappraisal	Males	1.37048666	-0.58222	0.5611
	Females	1.43421333		
Occupation Effects				
Confrontive Coping	Others	1.07950383	1.99979	0.0469
	Nurses	0.87915090		
Distancing	Others	1.25993451	1.672011	0.0961
	Nurses	1.10266919		
Self Controlling	Others	1.41106513	0.712801	0.4768
	Nurses	1.34101964		
Seeking Social Support	Others	1.26129426	-0.74342	0.4581
	Nurses	1.33354351		
Accepting Responsibility	Others	0.95379620	1.650547	0.1004
	Nurses	0.75220681		

Escape	Others	1.16930986	1.457982	0.1465
Avoidance	Nurses	1.01213745		
Planful	Others	1.48723499	-0.47949	0.6321
Problem	Nurses	1.53667507		
Solving				
Positive	Others	1.38846867	-0.25364	0.8000
Reappraisal	Nurses	1.41623131		

Sex by Occupation Interaction

Confrontive Coping

Sex	Occupation	Confcoping Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	1.11355311	1	.	1.097109 0.2740	0.613621 0.5402	3.221617 0.0015
Male	Nurses	0.93589744	2	-1.09711 0.2740	.	-0.61261 0.5409	0.680276 0.4971
Female	Others	1.04545455	3	-0.61362 0.5402	0.612612 0.5409	.	1.889973 0.0603
Female	Nurses	0.82240437	4	-3.22162 0.0015	-0.68028 0.4971	-1.88997 0.0603	.

Distancing

Sex	Occupation	Distancing Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	1.28754579	1	.	1.385458 0.1675	0.530024 0.5967	1.875554 0.0622
Male	Nurses	1.07692308	2	-1.38546 0.1675	.	-0.92558 0.3558	-0.32876 0.7427
Female	Others	1.23232323	3	-0.53002 0.5967	0.925579 0.3558	.	0.937819 0.3495
Female	Nurses	1.12841530	4	-1.87555 0.0622	0.328757 0.7427	-0.93782 0.3495	.

Self Control

Sex	Occupation	Scontrol Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	1.42386185	1	.	1.146539 0.2530	0.23512 0.8144	-0.18523 0.8532
Male	Nurses	1.24175824	2	-1.14654 0.2530	.	-0.89225 0.3734	-1.21318 0.2265
Female	Others	1.39826840	3	-0.23512 0.8144	0.892251 0.3734	.	-0.36294 0.7170
Female	Nurses	1.44028103	4	0.185229 0.8532	1.213181 0.2265	0.362938 0.7170	.

Seeking Social Support

Sex	Occupation	SeekSSupt Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|			
			i/j	1	2	3
Male	Others	1.30036630	1	.	0.361453 0.7182	0.725889 0.4688
Male	Nurses	1.24358974	2	-0.36145 0.7182	.	0.123172 0.9021
Female	Others	1.22222222	3	-0.72589 0.4688	-0.12317 0.9021	.
Female	Nurses	1.42349727	4	1.404554 0.1618	1.111674 0.2677	1.758147 0.0803

Accepting Responsibility

Sex	Occupation	AcceptResp Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|			
			i/j	1	2	3
Male	Others	1.04395604	1	.	1.196849 0.2328	1.332835 0.1841
Male	Nurses	0.80769231	2	-1.19685 0.2328	.	-0.25661 0.7978
Female	Others	0.86363636	3	-1.33284 0.2474	0.256608	.
Female	Nurses	0.69672131	4	-3.15176 0.0019	-0.54563 0.5859	-1.16017 0.2474

Escape-avoidance

Sex	Occupation	EscAvoid Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|			
			i/j	1	2	3
Male	Others	1.08104396	1	.	0.796247 0.4269	-1.47833 0.1409
Male	Nurses	0.94230769	2	-0.79625 0.4269	.	-1.63837 0.1030
Female	Others	1.25757576	3	1.478332 0.1409	1.63837 0.1030	.
Female	Nurses	1.08196721	4	0.009494 0.9924	0.777989 0.4375	-1.38288 0.1683

Planful Problem Solving

Sex	Occupation	PlanProbSo Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|			
			i/j	1	2	3
Male	Others	1.60073260	1	.	0.065938 0.9475	1.987411 0.0483
Male	Nurses	1.58974359	2	-0.06594 0.9475	.	1.1736 0.2420
Female	Others	1.37373737	3	-1.98741 0.0483	-1.1736 0.2420	.
Female	Nurses	1.48360656	4	-1.25928	-0.61815	0.904561

0.2094 0.5372 0.3668

Positive Reappraisal

Sex	Occupation	PosApprai Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Others	1.40031397	1	.	0.337202	0.195395	-0.92663
					0.7363	0.8453	0.3553
Male	Nurses	1.34065934	2	-0.3372	.	-0.18407	-0.82924
				0.7363		0.8541	0.4080
Female	Others	1.37662338	3	-0.1954	0.184073	.	-0.89332
				0.8453	0.8541		0.3728
Female	Nurses	1.49180328	4	0.926627	0.829244	0.893317	.
				0.3553	0.4080	0.3728	

Table B.102: Least square means, t-tests and p-values for stressors by sex, occupation and sex by occupation for nurses and corpsmen, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Effects				
Injury Factor	Males	2.68588640	-2.68637	0.0079
	Females	3.40601023		
Work demands factor	Males	3.65117613	-4.7466	0.0001
	Females	5.00063939		
Heat Stress	Males	5.08218589	-0.18682	0.8520
	Females	5.14482097		
Separation from Family	Males	5.78786575	0.416467	0.6776
	Females	5.66592072		

Occupation Effects

Injury Factor	Corpsmen	3.25576218	1.565393	0.1192
	Nurses	2.83613445		
Work demands Factor	Corpsmen	4.48865025	1.14486	0.2538
	Nurses	4.16316527		
Heat Stress	Corpsmen	5.05578837	-0.3443	0.7310
	Nurses	5.17121849		
Separation from Family	Corpsmen	5.39811420	-2.2457	0.0259
	Nurses	6.05567227		

Sex by Occupation Interactions

Injury Factor

Sex	Occupation	MINJSTS Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4	Pr > |T|
Male	Corpsmen	2.72891566	1	.	0.209105	-3.1392	-1.28973	
					0.8346	0.0020	0.1988	
Male	Nurses	2.64285714	2	-0.20911	.	-2.36043	-0.92465	
					0.8346	0.0193	0.3564	
Female	Corpsmen	3.78260870	3	3.139196	2.360432	.	2.192101	
					0.0020	0.0193	0.0296	
Female	Nurses	3.02941176	4	1.289728	0.924649	-2.1921	.	

0.1988 0.3564 0.0296

Trauma-related work demands factor:

Sex	Occupation	MWRKSTS Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Corpsmen	4.06425703	1	.	1.892773 0.0600	-2.38432 0.0181	-4.14393 0.0001
Male	Nurses	3.23809524	2	-1.89277 0.0600	.	-3.27073 0.0013	-4.17285 0.0001
Female	Corpsmen	4.91304348	3	2.384321 0.0181	3.27073 0.0013	.	-0.48076 0.6313
Female	Nurses	5.08823529	4	4.143926 0.0001	4.172847 0.0001	0.480759 0.6313	.

Heat Stress

Sex	Occupation	HEASTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Corpsmen	4.80722892	1	.	-1.06837 0.2868	-1.18418 0.2379	-0.61107 0.5419
Male	Nurses	5.35714286	2	1.068366 0.2868	.	0.087424 0.9304	0.711191 0.4779
Female	Corpsmen	5.30434783	3	1.184182 0.2379	-0.08742 0.9304	.	0.742454 0.4588
Female	Nurses	4.98529412	4	0.611072 0.5419	-0.71119 0.4779	-0.74245 0.4588	.

Separation from Family

Sex	Occupation	SFMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Corpsmen	5.36144578	1	.	-1.89713 0.0594	-0.20002 0.8417	-2.10459 0.0367
Male	Nurses	6.21428571	2	1.897127 0.0594	.	1.477939 0.1411	0.694694 0.4881
Female	Corpsmen	5.43478261	3	0.200025 0.8417	-1.47794 0.1411	.	-1.23172 0.2196
Female	Nurses	5.89705882	4	2.104592 0.0367	-0.69469 0.4881	1.231717 0.2196	.

Table B.103: Least square means, t-tests and p-values for stress reducers by sex, occupation and sex by occupation interactions for nurses and corpsmen, Comfort study, time 1.

Stressor	Sex	Lsmeans	T-test	P-value
Sex Main Effects				
Gym	Males	4.99285714	0.918356	0.3600
	Females	4.60500000		
Movies	Males	4.69285714	2.377509	0.0187
	Females	3.89000000		
Eating	Males	3.76071429	0.957633	0.3399
	Females	3.41500000		
Weather Decks	Males	4.90357143	-0.94208	0.3477
	Females	5.23000000		
Lounges	Males	3.68690476	0.699124	0.4856
	Females	3.42500000		
Reading	Males	4.46666667	-1.26507	0.2079
	Females	4.94625000		
Time Alone	Males	5.86190476	1.03131	0.3041
	Females	5.48375000		
Library	Males	3.63571429	1.521307	0.1304
	Females	3.09875000		
Separation from Family	Males	5.62261905	0.087097	0.9307
	Females	5.59750000		
Reading Mail	Males	6.57500000	2.444479	0.0157
	Females	5.95000000		
Writing Mail	Males	5.64047619	1.553319	0.1225
	Females	5.12875000		
Occupation Main Effects				
Gym	Corpsmen	4.86785714	0.326414	0.7446
	Nurses	4.73000000		
Movies	Corpsmen	4.44285714	0.896854	0.3713
	Nurses	4.14000000		
Eating	Corpsmen	3.01071429	-3.19739	0.0017
	Nurses	4.16500000		

Weather Decks	Corpsmen	4.77857143	-1.66358	0.0984
	Nurses	5.35500000		
Lounges	Corpsmen	3.60357143	0.254227	0.7997
	Nurses	3.50833333		
Reading	Corpsmen	4.70625000	-0.0011	0.9991
	Nurses	4.70666667		
Time Alone	Corpsmen	5.37232143	-1.63909	0.1034
	Nurses	5.97333333		
Library	Corpsmen	3.60446429	1.344235	0.1810
	Nurses	3.13000000		
Separation from Family	Corpsmen	5.60178571	-0.05738	0.9543
	Nurses	5.61833333		
Reading Mail	Corpsmen	5.95000000	-2.44448	0.0157
	Nurses	6.57500000		
Writing Mail	Corpsmen	5.27589286	-0.66003	0.5103
	Nurses	5.49333333		

Sex by Occupation Interactions

Gym

Sex	Occupation	GYMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	Pr > |T|		
				1	2	3
Male	Corpsmen	4.98571429	1	.	-0.02297	0.4274
					0.9817	0.6697
Male	Nurses	5.00000000	2	0.022973	.	0.328928
				0.9817		0.7427
Female	Corpsmen	4.75000000	3	-0.4274	-0.32893	.
				0.6697	0.7427	
Female	Nurses	4.46000000	4	-1.42654	-0.84404	-0.50729
				0.1559	0.4000	0.6127

Movies

Sex	Occupation	MOVSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	Pr > |T|		
				1	2	3
Male	Corpsmen	4.88571429	1	.	0.775769	2.008571
					0.4392	0.0465
Male	Nurses	4.50000000	2	-0.77577	.	0.822764
				0.4392		0.4120
Female	Corpsmen	4.00000000	3	-2.00857	-0.82276	.
				0.0465	0.4120	
Female	Nurses	3.78000000	4	-3.75249	-1.40749	-0.48132

0.0003 0.1614 0.6310

Eating

Sex	Occupation	EATSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4	Pr > |T|
Male	Corpsmen	3.27142857	1	.	-1.84101 0.0677	1.106079 0.2705	-2.56681 0.0113	
Male	Nurses	4.25000000	2	1.841013 0.0677	.	2.308843 0.0224	0.310857 0.7564	
Female	Corpsmen	2.75000000	3	-1.10608 0.2705	-2.30884 0.0224	.	-2.7218 0.0073	
Female	Nurses	4.08000000	4	2.566808 0.0113	-0.31086 0.7564	2.7218 0.0073	.	

Weather Decks

Sex	Occupation	WDSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4	Pr > |T|
Male	Corpsmen	4.55714286	1	.	-1.35808 0.1766	-0.97875 0.3293	-2.98615 0.0033	
Male	Nurses	5.25000000	2	1.358079 0.1766	.	0.400922 0.6891	-0.40008 0.6897	
Female	Corpsmen	5.00000000	3	0.978751 0.3293	-0.40092 0.6891	.	-0.9808 0.3283	
Female	Nurses	5.46000000	4	2.986147 0.0033	0.400081 0.6897	0.980798 0.3283	.	

Lounges

Sex	Occupation	LNGSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4	Pr > |T|
Male	Corpsmen	3.95714286	1	.	0.979873 0.3288	1.445531 0.1505	1.092562 0.2764	
Male	Nurses	3.41666667	2	-0.97987 0.3288	.	0.247218 0.8051	-0.32306 0.7471	
Female	Corpsmen	3.25000000	3	-1.44553 0.1505	-0.24722 0.8051	.	-0.69024 0.4912	
Female	Nurses	3.60000000	4	-1.09256 0.2764	0.323059 0.7471	0.690242 0.4912	.	

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Reading

Sex	Occupation	REASTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4	Pr > T
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Male	Corpsmen	4.60000000	1	.	0.477749	-0.42926	-1.45105
					0.6336	0.6684	0.1489
Male	Nurses	4.33333333	2	-0.47775	.	-0.70236	-1.30019
				0.6336		0.4836	0.1956
Female	Corpsmen	4.81250000	3	0.429257	0.702355	.	-0.52131
				0.6684	0.4836		0.6030
Female	Nurses	5.08000000	4	1.451053	1.300185	0.521309	.
				0.1489	0.1956	0.6030	

Time alone

Sex	Occupation	TASTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Corpsmen	5.55714286	1	.	-1.129	0.77199	-0.69653
					0.2608	0.4414	0.4872
Male	Nurses	6.16666667	2	1.128997	.	1.483876	0.696123
				0.2608		0.1400	0.4875
Female	Corpsmen	5.18750000	3	-0.77199	-1.48388	.	-1.1938
				0.4414	0.1400		0.2345
Female	Nurses	5.78000000	4	0.696529	-0.69612	1.193798	.
				0.4872	0.4875	0.2345	

Library

Sex	Occupation	LIBSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Corpsmen	3.77142857	1	.	0.522288	0.724494	3.283976
					0.6023	0.4699	0.0013
Male	Nurses	3.50000000	2	-0.52229	.	0.098395	1.38399
				0.6023		0.9218	0.1685
Female	Corpsmen	3.43750000	3	-0.72449	-0.09839	.	1.41809
				0.4699	0.9218		0.1583
Female	Nurses	2.76000000	4	-3.28398	-1.38399	-1.41809	.
				0.0013	0.1685	0.1583	

Separation from Family

Sex	Occupation	SFSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Corpsmen	5.82857143	1	.	0.970015	1.204355	0.03406
					0.3337	0.2304	0.9729
Male	Nurses	5.41666667	2	-0.97002	.	0.08028	-0.92319
				0.3337		0.9361	0.3575
Female	Corpsmen	5.37500000	3	-1.20435	-0.08028	.	-1.13994
				0.2304	0.9361		0.2562
Female	Nurses	5.82000000	4	-0.03406	0.923194	1.13994	.
				0.9729	0.3575	0.2562	

Reading Mail

Sex	Occupation	RMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	6.40000000	1	.	-0.92973 0.3541	2.695619 0.0079	-199E-17 1.0000
Male	Nurses	6.75000000	2	0.92973 0.3541	.	2.716676 0.0074	0.903658 0.3677
Female	Corpsmen	5.50000000	3	-2.69562 0.0079	-2.71668 0.0074	.	-2.60059 0.0103
Female	Nurses	6.40000000	4	1.99E-15 1.0000	-0.90366 0.3677	2.600589 0.0103	.

Writing Mail

Sex	Occupation	WMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	5.61428571	1	.	-0.10799 0.9142	1.573199 0.1179	1.02373 0.3077
Male	Nurses	5.66666667	2	0.107989 0.9142	.	1.229904 0.2207	0.694648 0.4884
Female	Corpsmen	4.93750000	3	-1.5732 0.1179	-1.2299 0.2207	.	-0.85778 0.3924
Female	Nurses	5.32000000	4	-1.02373 0.3077	-0.69465 0.4884	0.857783 0.3924	.

Table B.104: Least square means, t-tests and p-values for social field stress by sex, occupation and sex by occupation interactions for nurses and corpsmen, Comfort study, time 1.

Sex Main Effects

Stressor	Sex	Lsmeans	T-test	P-value
Self	Males	5.21603376	-2.49667	0.0135
	Females	5.88858696		
Significant Others	Males	6.81603376	1.211978	0.2271
	Females	6.54823370		
Child	Males	6.90632911	-1.75181	0.0815
	Females	7.45006793		
Supervisor	Males	5.38016878	-0.66682	0.5058
	Females	5.60529891		
Coworkers	Males	5.28607595	-0.76064	0.4479
	Females	5.52615489		

Occupation Main Effects:

Self	Corpsmen	5.27545405	-2.0555	0.0413
	Nurses	5.82916667		
Significant Others	Corpsmen	6.73197578	0.45113	0.6524
	Nurses	6.63229167		
Child	Corpsmen	7.24545955	0.43340	0.6653
	Nurses	7.11093750		
Supervisor	Corpsmen	4.89900936	-3.51714	0.0006
	Nurses	6.08645833		
Coworkers	Corpsmen	4.95129334	-2.88202	0.0044
	Nurses	5.86093750		

Sex by Occupation Interaction

Self

Sex	Occupation	STYOUT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > T 4
Male	Corpsmen	4.89873418	1	.	-1.55601	-2.19606	-5.03544
					0.1215	0.0294	0.0001
Male	Nurses	5.53333333	2	1.556009	.	-0.24729	-1.42435
					0.1215	0.8050	0.1561

Female	Corpsmen	5.65217391	3	2.196055 0.0294	0.247286 0.8050	- .	-1.34311 0.1810
Female	Nurses	6.12500000	4	5.035441 0.0001	1.42435 0.1561	1.343115 0.1810	.

Significant Others

Sex	Occupation	STSSOT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	6.89873418	1	.	0.494424 0.6216	1.185117 0.2376	1.839672 0.0675
Male	Nurses	6.73333333	2	-0.49442 0.6216	.	0.426474 0.6703	0.593087 0.5539
Female	Corpsmen	6.56521739	3	-1.18512 0.2376	-0.42647 0.6703	.	0.117631 0.9065
Female	Nurses	6.53125000	4	-1.83967 0.0675	-0.59309 0.5539	-0.11763 0.9065	.

Child

Sex	Occupation	STCHLDT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	7.01265823	1	.	0.45254 0.6514	-1.1778 0.2405	-1.45837 0.1465
Male	Nurses	6.80000000	2	-0.45254 0.6514	.	-1.22488 0.2222	-1.29929 0.1955
Female	Corpsmen	7.47826087	3	1.177802 0.2405	1.224881 0.2222	.	0.139009 0.8896
Female	Nurses	7.42187500	4	1.458373 0.1465	1.299286 0.1955	-0.13901 0.8896	.

Supervisor

Sex	Occupation	STSUPT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	4.49367089	1	.	-3.46865 0.0007	-1.88531 0.0610	-4.62813 0.0001
Male	Nurses	6.26666667	2	3.468647 0.0007	.	1.597695 0.1119	0.692284 0.4897
Female	Corpsmen	5.30434783	3	1.885308 0.0610	-1.59769 0.1119	.	-1.3642 0.1742
Female	Nurses	5.90625000	4	4.628128 0.0001	-0.69228 0.4897	1.364198 0.1742	.

Coworkers

Sex	Occupation	STCOWT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > T 4
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Male	Corpsmen	4.77215190	1	.	-2.15096	-0.89127	-4.02936
					0.0328	0.3740	0.0001
Male	Nurses	5.80000000	2	2.150956	.	1.189099	-0.25041
				0.0328		0.2360	0.8026
Female	Corpsmen	5.13043478	3	0.891273	-1.1891	.	-1.91876
				0.3740	0.2360		0.0566
Female	Nurses	5.92187500	4	4.029361	0.250406	1.918756	.
				0.0001	0.8026	0.0566	

Table B.105: Least square means, t-tests, and p-values for SCL-90 outcomes by sex, occupation and sex by occupation interactions for nurses and corpsmen, Comfort study, time 1.

Sex Main Effects

Stressor	Sex	Lsmeans	T-test	P-value
Somatization	Males	0.45389131	-0.9249	0.3563
	Females	0.55213068		
Depression	Males	0.86099713	-1.7146	0.0882
	Females	1.10383614		
Anxiety	Males	0.52391501	-1.49515	0.1367
	Females	0.71203125		
Hostility	Males	0.86384870	0.422911	0.6729
	Females	0.80052083		

Occupation Main Effects

Somatization	Corpsmen	0.56855581	1.234179	0.2188
	Nurses	0.43746618		
Depression	Corpsmen	1.07709145	1.336931	0.1830
	Nurses	0.88774182		
Anxiety	Corpsmen	0.67177215	0.855188	0.3936
	Nurses	0.56417411		
Hostility	Corpsmen	1.02932489	2.633047	0.0092
	Nurses	0.63504464		

Sex by Occupation Interactions:

Somatization

Sex	Occupation	SOMT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	0.46135405	1	.	0.09375	-1.56009	0.355781
				.	0.9254	0.1206	0.7224
Male	Nurses	0.44642857	2	-0.09375	.	-1.19869	0.110654
				0.9254	.	0.2323	0.9120
Female	Corpsmen	0.67575758	3	1.560094	1.198689	.	1.757989
				0.1206	0.2323	.	0.0805
Female	Nurses	0.42850379	4	-0.35578	-0.11065	-1.75799	.
				0.7224	0.9120	0.0805	.

Depression

Sex	Occupation	DEPT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Corpsmen	0.96924700	1	.	1.01985 0.3092	-1.17701 0.2408	-0.43446 0.6645
Male	Nurses	0.75274725	2	-1.01985 0.3092	.	-1.69416 0.0920	-1.24996 0.2130
Female	Corpsmen	1.18493590	3	1.177013 0.2408	1.694164 0.0920	.	0.864883 0.3883
Female	Nurses	1.02273638	4	0.434456 0.6645	1.249959 0.2130	-0.86488 0.3883	.

Anxiety

Sex	Occupation	ANXT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Corpsmen	0.58354430	1	.	0.632384	-1.08393	-0.73618
					0.5280	0.2799	0.4626
Male	Nurses	0.46428571	2	-0.63238	.	-1.30487	-1.04113
					0.5280	0.1937	0.2993
Female	Corpsmen	0.76000000	3	1.083932	1.30487	.	0.57585
					0.2799	0.1937	0.5655
Female	Nurses	0.66406250	4	0.736181	1.041135	-0.57585	.
					0.4626	0.2993	0.5655

Hostility

Sex	Occupation	HOST1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Corpsmen	1.02531646	1	.	1.43881 0.1520	-0.04138 0.9670	3.51545 0.0006
Male	Nurses	0.70238095	2	-1.43881 0.1520	.	-1.22703 0.2215	0.589709 0.5562
Female	Corpsmen	1.03333333	3	0.041378 0.9670	1.227034 0.2215	.	2.348299 0.0200
Female	Nurses	0.56770833	4	-3.51545 0.0006	-0.58971 0.5562	-2.3483 0.0200	.

Table B.106: Least square means, t-tests and p-values for perceived social support by sex, occupation and sex by occupation interactions for nurses and corpsmen, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Main Effect				
Perceived Social Support - Spouse/ Significant Other	Males	17.1051186	1.177053	0.2414
	Females	15.9471235		
Perceived Social Support - Friend	Males	15.9329815	-0.63708	0.5252
	Females	16.4114292		

Occupation Main Effect

Perceived Social Support - Spouse/ Significant Other	Corpsmen	16.4042257	-0.2478	0.8047
	Nurses	16.6480163		
Perceived Social Support - Friend	Corpsmen	14.6785172	-3.97783	0.0001
	Nurses	17.6658935		

Sex by Occupation Interactions

Perceived Social Support - Spouse/ Significant Others

Sex	Occupation	PSSCORT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	17.9959514	1	.	1.256022	2.363648	0.96417
					0.2115	0.0196	0.3368
Male	Nurses	16.2142857	2	-1.25602	.	0.81306	-0.60475
				0.2115		0.4177	0.5464
Female	Corpsmen	14.8125000	3	-2.36365	-0.81306	.	-1.66417
				0.0196	0.4177		0.0986
Female	Nurses	17.0817469	4	-0.96417	0.60475	1.664171	.
				0.3368	0.5464	0.0986	

Perceived Social Support - Friend

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Sex	Occupation	PSFSCOT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > T 4
Male	Corpsmen	14.2945344	1	.	-3.02622	-0.74695	-4.78833
					0.0030	0.4565	0.0001
Male	Nurses	17.5714286	2	3.026219	.	1.90632	-0.17254
				0.0030		0.0589	0.8633

Female	Corpsmen	15.0625000	3	0.746953	-1.90632	.	-2.5918
				0.4565	0.0589		0.0107
Female	Nurses	17.7603583	4	4.788325	0.172541	2.591803	.
				0.0001	0.8633	0.0107	

Table B.107: Least square means, t-tests and p-values for Ways of Coping subscales by sex, occupation and sex by occupation interactions for nurses and corpsmen, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Effects				
Confrontive Coping	Males	1.06231146	1.022787	0.3080
	Females	0.95506183		
Distancing	Males	1.22596154	0.337064	0.7365
	Females	1.19140063		
Self Control	Males	1.32255979	-1.04637	0.2970
	Females	1.43442623		
Seeking Social Support	Males	1.27865762	-0.6031	0.5473
	Females	1.34332758		
Accepting Responsibility	Males	0.94244910	0.981084	0.3281
	Females	0.80888697		
Escape Avoidance	Males	1.07593326	-1.31342	0.1910
	Females	1.21861519		
Planful Problem Solving	Males	1.56447964	1.631201	0.1049
	Females	1.38654012		
Positive Reappraisal	Males	1.38671622	-0.23972	0.8109
	Females	1.41507457		
Occupation Effects				
Confrontive Coping	Corpsmen	1.13822239	2.470639	0.0146
	Nurses	0.87915090		
Distancing	Corpsmen	1.31469298	2.067815	0.0403
	Nurses	1.10266919		
Self Control	Corpsmen	1.41596639	0.701032	0.4843
	Nurses	1.34101964		
Seeking Social	Corpsmen	1.28844169	-0.42061	0.6746
	Nurses	1.33354351		
Accepting	Corpsmen	0.99912926	1.813775	0.0716

Responsibility	Nurses	0.75220681		
Escape	Corpsmen	1.28241099	2.487936	0.0139
Avoidance	Nurses	1.01213745		
Planful	Corpsmen	1.41434469	-1.12142	0.2638
Problem	Nurses	1.53667507		
Solving				
Positive	Corpsmen	1.38555949	-0.25928	0.7958
Reappraisal	Nurses	1.41623131		

Sex by Occupation Interaction

Confrontive Coping

Sex	Occupation	MCONFCT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	1.18872549	1	.	1.596299	0.743918	3.970012
					0.1124	0.4580	0.0001
Male	Nurses	0.93589744	2	-1.5963	.	-0.80614	0.710061
				0.1124		0.4214	0.4787
Female	Corpsmen	1.08771930	3	-0.74392	0.806145	.	1.930029
				0.4580	0.4214		0.0554
Female	Nurses	0.82240437	4	-3.97001	-0.71006	-1.93003	.
				0.0001	0.4787	0.0554	

Distancing

Sex	Occupation	MDISTT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	1.37500000	1	.	1.924664	0.908474	2.732962
					0.0561	0.3650	0.0070
Male	Nurses	1.07692308	2	-1.92466	.	-0.96366	-0.32946
				0.0561		0.3367	0.7422
Female	Corpsmen	1.25438596	3	-0.90847	0.96366	.	0.93715
				0.3650	0.3367		0.3501
Female	Nurses	1.12841530	4	-2.73296	0.329462	-0.93715	.
				0.0070	0.7422	0.3501	

Self Control

Sex	Occupation	MSELCT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	1.40336134	1	.	1.00077	-0.18212	-0.39245
					0.3185	0.8557	0.6953
Male	Nurses	1.24175824	2	-1.00077	.	-0.97293	-1.21824
				0.3185		0.3321	0.2250

Female	Corpsmen	1.42857143	3	0.182116 0.8557	0.972931 0.3321	.	-0.08355 0.9335
Female	Nurses	1.44028103	4	0.392449 0.6953	1.218238 0.2250	0.083549 0.9335	.

Seeking Social Support

Sex	Occupation	MSESST1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	1.31372549	1	.	0.433038 0.6656	0.364206 0.7162	-1.16337 0.2464
Male	Nurses	1.24358974	2	-0.43304 0.6656	.	-0.10161 0.9192	-1.10071 0.2727
Female	Corpsmen	1.26315789	3	-0.36421 0.7162	0.101608 0.9192	.	-1.14062 0.2558
Female	Nurses	1.42349727	4	1.16337 0.2464	1.100709 0.2727	1.140616 0.2558	.

Accepting Responsibility

Sex	Occupation	MACRET1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	1.07720588	1	.	1.310699 0.1919	0.885852 0.3771	3.176144 0.0018
Male	Nurses	0.80769231	2	-1.3107 0.1919	.	-0.46363 0.6436	0.534772 0.5936
Female	Corpsmen	0.92105263	3	-0.88585 0.3771	0.463632 0.6436	.	1.256971 0.2106
Female	Nurses	0.69672131	4	-3.17614 0.0018	-0.53477 0.5936	-1.25697 0.2106	.

Escape-avoidance

Sex	Occupation	MESAVT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	1.20955882	1	.	1.628751 0.1054	-1.03585 0.3019	1.334744 0.1839
Male	Nurses	0.94230769	2	-1.62875 0.1054	.	-2.11655 0.0359	-0.84342 0.4003
Female	Corpsmen	1.35526316	3	1.035847 0.3019	2.116548 0.0359	.	1.919028 0.0568
Female	Nurses	1.08196721	4	-1.33474 0.1839	0.843418 0.4003	-1.91903 0.0568	.

Planful Problem Solving

Sex	Occupation	MPLPRST1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > T 4
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Male	Corpsmen	1.53921569	1	.	-0.30667	1.768129	0.579324
					0.7595	0.0790	0.5632
Male	Nurses	1.58974359	2	0.306666	.	1.532625	0.63832
				0.7595		0.1274	0.5242
Female	Corpsmen	1.28947368	3	-1.76813	-1.53263	.	-1.35752
				0.0790	0.1274		0.1766
Female	Nurses	1.48360656	4	-0.57932	-0.63832	1.357521	.
				0.5632	0.5242	0.1766	

Positive Reappraisal

Sex	Occupation	MPORET1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Corpsmen	1.43277311	1	.	0.515524	0.616467	-0.56707
					0.6069	0.5385	0.5715
Male	Nurses	1.34065934	2	-0.51552	.	0.010889	-0.83821
				0.6069		0.9913	0.4032
Female	Corpsmen	1.33834586	3	-0.61647	-0.01089	.	-0.98952
				0.5385	0.9913		0.3239
Female	Nurses	1.49180328	4	0.567074	0.838209	0.989522	.
				0.5715	0.4032	0.3239	

Table B.108: Least square means, t-tests and p-values for stressors by sex, age and sex by age interaction for all respondents, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
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Sex Effects

Injury Factor	Males	2.67953431	-3.36564	0.0009
	Females	3.31158088		
Work demands Factor	Males	3.92385621	-6.01205	0.0001
	Females	5.10318627		
Heat Stress	Males	5.02892157	-0.49658	0.6200
	Females	5.14191176		
Separation from Family	Males	5.65686275	-0.80543	0.4214
	Females	5.81838235		

Age Effects

Injury Factor	Younger	3.05974265	0.683569	0.4949
	Older	2.93137255		
Work demands Factor	Younger	4.83357843	3.263207	0.0013
	Older	4.19346405		
Heat Stress	Younger	4.83308824	-2.21793	0.0275
	Older	5.33774510		
Separation from Family	Younger	5.68602941	-0.51454	0.6074
	Older	5.78921569		

Sex by Age Interactions

Injury Factor

Sex	Age	MINJSTS Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	2.65073529	1	.	-0.23083	-2.91401	-2.08472
					0.8177	0.0039	0.0382
Male	Older	2.70833333	2	0.230829 0.8177	.	-2.64432	-1.7877
					0.0087	0.0751	
Female	Younger	3.46875000	3	2.914009 0.0039	2.644323	.	1.119765
					0.0087	0.2640	

Female	Older	3.15441176	4	2.084723	1.787696	-1.11977	.
				0.0382	0.0751	0.2640	

Trauma-related work demands factor

Sex	Age	MWRKSTS Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	4.14215686	1	.	1.675082	-4.71597	-2.13662
					0.0953	0.0001	0.0337
Male	Older	3.70555556	2	-1.67508	.	-6.05718	-3.74386
				0.0953		0.0001	0.0002
Female	Younger	5.52500000	3	4.715975	6.057179	.	2.877062
				0.0001	0.0001		0.0044
Female	Older	4.68137255	4	2.136623	3.743859	-2.87706	.
				0.0337	0.0002	0.0044	

Heat Stress

Sex	Age	HEASTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	4.69117647	1	.	-2.23427	-0.83447	-2.10994
					0.0264	0.4049	0.0359
Male	Older	5.36666667	2	2.234266	.	1.124121	0.191323
				0.0264		0.2621	0.8484
Female	Younger	4.97500000	3	0.834472	-1.12412	.	-0.98148
				0.4049	0.2621		0.3274
Female	Older	5.30882353	4	2.109942	-0.19132	0.981477	.
				0.0359	0.8484	0.3274	

Separation from Family

Sex	Age	SFMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	5.39705882	1	.	-1.95003	-1.92795	-1.02599
					0.0524	0.0551	0.3060
Male	Older	5.91666667	2	1.950029	.	-0.18996	0.956618
				0.0524		0.8495	0.3398
Female	Younger	5.97500000	3	1.927953	0.18996	.	1.044921
				0.0551	0.8495		0.2971
Female	Older	5.66176471	4	1.02599	-0.95662	-1.04492	.
				0.3060	0.3398	0.2971	

Table B.109: Least square means, t-tests and p-values for stressors reducers by sex, age and sex by age interactions for all respondents, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Effects				
Gym	Males	5.21130952	1.80559	0.0726
	Females	4.69448276		
Movies	Males	4.69742063	3.39242	0.0008
	Females	3.87000000		
Eating	Males	3.38260582	-0.95611	0.3403
	Females	3.63241379		
Weather Decks	Males	4.64120370	-2.58386	0.0105
	Females	5.27344828		
Lounges	Males	3.71097884	0.844551	0.3995
	Females	3.49310345		
Reading	Males	4.64021164	-1.0735	0.2844
	Females	4.92000000		
Time Alone	Males	5.49140212	-0.32779	0.7434
	Females	5.57689655		
Library	Males	3.55555556	1.857212	0.0649
	Females	3.09448276		
With Friends	Males	5.76091270	0.401418	0.6886
	Females	5.68000000		
Reading Mail	Males	6.41137566	1.430871	0.1542
	Females	6.15620690		
Writing Mail	Males	5.65509259	1.465292	0.1445
	Females	5.32241379		
Age Effects				
Gym	Younger	5.07912562	0.881993	0.3789
	Older	4.82666667		
Movies	Younger	4.41964286	1.114645	0.2664
	Older	4.14777778		
Eating	Younger	3.34205665	-1.2665	0.2069
	Older	3.67296296		

Weather Decks	Younger	4.79094828	-1.3599	0.1755
	Older	5.12370370		
Lounges	Younger	3.84667488	1.896549	0.0594
	Older	3.35740741		
Reading	Younger	4.71428571	-0.50508	0.6141
	Older	4.84592593		
Time Alone	Younger	5.43903941	-0.7293	0.4667
	Older	5.62925926		
Library	Younger	3.28448276	-0.32656	0.7444
	Older	3.36555556		
With Friends	Younger	5.95535714	2.330745	0.0208
	Older	5.48555556		
Reading Mail	Younger	6.22906404	-0.61377	0.5401
	Older	6.33851852		
Writing Mail	Younger	5.48491379	-0.03382	0.9731
	Older	5.49259259		

Sex by Age Interactions

Gym

Sex	Age	GYMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	/ Pr > |T|			4
				1	2	3	
Male	Younger	5.08928571	1	.	-0.67375	0.046767	2.081807
					0.5013	0.9627	0.0387
Male	Older	5.33333333	2	0.673745	.	0.604633	2.718593
				0.5013		0.5462	0.0072
Female	Younger	5.06896552	3	-0.04677	-0.60463	.	1.689503
				0.9627	0.5462		0.0928
Female	Older	4.32000000	4	-2.08181	-2.71859	-1.6895	.
				0.0387	0.0072	0.0928	

Movies

Sex	Age	MOVSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	/ Pr > |T|			4
				1	2	3	
Male	Younger	4.83928571	1	.	0.919255	2.266884	3.491182
					0.3592	0.0246	0.0006
Male	Older	4.55555556	2	-0.91925	.	1.491146	2.567761
				0.3592		0.1376	0.0110
Female	Younger	4.00000000	3	-2.26688	-1.49115	.	0.688303
				0.0246	0.1376		0.4921
Female	Older	3.74000000	4	-3.49118	-2.56776	-0.6883	.
				0.0006	0.0110	0.4921	

Eating

Sex	Age	EATSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Younger	3.33928571	1	.	-0.26204 0.7936	-0.01397 0.9889	-1.72164 0.0868
Male	Older	3.42592593	2	0.26204 0.7936	.	0.203199 0.8392	-1.45215 0.1482
Female	Younger	3.34482759	3	0.013973 0.9889	-0.2032 0.8392	.	-1.42142 0.1569
Female	Older	3.92000000	4	1.721636 0.0868	1.452145 0.1482	1.421416 0.1569	.

Weather Decks

Sex	Age	WDSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Younger	4.37500000	1	.	-1.71939 0.0872	-2.23969 0.0263	-3.05485 0.0026
Male	Older	4.90740741	2	1.719391 0.0872	.	-0.80126 0.4240	-1.35763 0.1762
Female	Younger	5.20689655	3	2.239695 0.0263	0.801261 0.4240	.	-0.35123 0.7258
Female	Older	5.34000000	4	3.054846 0.0026	1.357626 0.1762	0.351233 0.7258	.

Lounges

Sex	Age	LNGSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Younger	4.10714286	1	.	2.427 0.0162	1.330265 0.1851	2.123262 0.0351
Male	Older	3.31481481	2	-2.427 0.0162	.	-0.68869 0.4919	-0.25357 0.8001
Female	Younger	3.58620690	3	-1.33027 0.1851	0.688691 0.4919	.	0.466054 0.6417
Female	Older	3.40000000	4	-2.12326 0.0351	0.253571 0.8001	-0.46605 0.6417	.

Reading

Sex	Age	REASTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Younger	4.42857143	1	.	-1.28336 0.2010	-1.44435 0.1503	-1.22277 0.2230
Male	Older	4.85185185	2	1.283359 0.2010	.	-0.37212 0.7102	0.03492 0.9722
Female	Younger	5.00000000	3	1.444345 0.1503	0.372116 0.7102	.	0.396384 0.6923
Female	Older	4.84000000	4	1.222774	-0.03492	-0.39638	.

0.2230 0.9722 0.6923

Time Alone

Sex	Age	TASTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	5.46428571	1	.	-0.16431 0.8697	0.127531 0.8987	-0.81882 0.4139
Male	Older	5.51851852	2	0.164309 0.8697	.	0.262854 0.7930	-0.65209 0.5152
Female	Younger	5.41379310	3	-0.12753 0.8987	-0.26285 0.7930	.	-0.80755 0.4204
Female	Older	5.74000000	4	0.818825 0.4139	0.652091 0.5152	0.80755 0.4204	.

Library

Sex	Age	LIBSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	3.50000000	1	.	-0.35367 0.7240	1.143774 0.2542	1.185644 0.2373
Male	Older	3.61111111	2	0.353669 0.7240	.	1.429609 0.1545	1.519111 0.1304
Female	Younger	3.06896552	3	-1.14377 0.2542	-1.42961 0.1545	.	-0.13273 0.8945
Female	Older	3.12000000	4	-1.18564 0.2373	-1.51911 0.1304	0.132733 0.8945	.

With Friends

Sex	Age	SFSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	5.91071429	1	.	1.174556 0.2417	-0.29181 0.7708	2.11634 0.0357
Male	Older	5.61111111	2	-1.17456 0.2417	.	-1.26303 0.2082	0.956674 0.3400
Female	Younger	6.00000000	3	0.291809 0.7708	1.263035 0.2082	.	2.050139 0.0418
Female	Older	5.36000000	4	-2.11634 0.0357	-0.95667 0.3400	-2.05014 0.0418	.

Reading Mail

Sex	Age	RMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	6.28571429	1	.	-1.11366 0.2669	0.418544 0.6760	0.632927 0.5276
Male	Older	6.53703704	2	1.113658 0.2669	.	1.338526 0.1824	1.709707 0.0890
Female	Younger	6.17241379	3	-0.41854	-1.33853	.	0.117362

				0.6760	0.1824		0.9067
Female	Older	6.14000000	4	-0.63293	-1.70971	-0.11736	.
				0.5276	0.0890	0.9067	

Writing Mail

Sex	Age	WMSTRT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	5.62500000	1	.	-0.20948	0.812944	1.10882
					0.8343	0.4173	0.2689
Male	Older	5.68518519	2	0.209477	.	0.981396	1.302826
				0.8343		0.3277	0.1943
Female	Younger	5.34482759	3	-0.81294	-0.9814	.	0.127487
				0.4173	0.3277		0.8987
Female	Older	5.30000000	4	-1.10882	-1.30283	-0.12749	.
				0.2689	0.1943	0.8987	

Table B.110: Least square means, t-tests and p-values for social field stress by sex, age, and sex by age interactions for all respondents, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Effects				
Self	Males	4.96159754	-4.92894	0.0001
	Females	5.93964077		
Significant Others	Males	6.78225806	1.595891	0.1119
	Females	6.53320802		
Child	Males	6.70622120	-3.74991	0.0002
	Females	7.52965748		
Supervisor	Males	4.71390169	-3.62054	0.0004
	Females	5.63116124		
Coworkers	Males	4.81810036	-3.21131	0.0015
	Females	5.58333333		

Age Effects

Self	Younger	5.28884712	-1.63053	0.1044
	Older	5.61239119		
Significant Others	Younger	6.72368421	0.845219	0.3989
	Older	6.59178187		
Child	Younger	7.60902256	4.472759	0.0001
	Older	6.62685612		
Supervisor	Younger	4.94862155	-1.7676	0.0785
	Older	5.39644137		
Coworker	Younger	5.02777778	-1.45148	0.1481
	Older	5.37365591		

Sex by Age Interactions

Self

Sex	Age	STYOUT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Younger	4.76190476	1	.	-1.5323	-3.52156	-5.01382
					0.1269	0.0005	0.0001
Male	Older	5.16129032	2	1.532301	.	-2.18041	-3.46143
					0.1269	0.0303	0.0006

Female	Younger	5.81578947	3	3.52156 0.0005	2.180406 0.0303	.	-0.8277 0.4087
Female	Older	6.06349206	4	5.013825 0.0001	3.461428 0.0006	0.827699 0.4087	.

Significant Others

Sex	Age	STSSOT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	7.00000000	1	.	2.124443 0.0347	2.348004 0.0198	1.865898 0.0634
Male	Older	6.56451613	2	-2.12444 0.0347	.	0.49623 0.6202	-0.26602 0.7905
Female	Younger	6.44736842	3	-2.348 0.0198	-0.49623 0.6202	.	-0.72943 0.4665
Female	Older	6.61904762	4	-1.8659 0.0634	0.266024 0.7905	0.729425 0.4665	.

Child

Sex	Age	STCHLDT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	7.42857143	1	.	5.008694 0.0001	-1.08975 0.2770	0.552523 0.5811
Male	Older	5.98387097	2	-5.00869 0.0001	.	-5.43557 0.0001	-4.45839 0.0001
Female	Younger	7.78947368	3	1.089749 0.2770	5.435574 0.0001	.	1.569037 0.1181
Female	Older	7.26984127	4	-0.55252 0.5811	4.458385 0.0001	-1.56904 0.1181	.

Supervisor

Sex	Age	STSUPT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	4.47619048	1	.	-1.42862 0.1545	-2.47284 0.0142	-4.11851 0.0001
Male	Older	4.95161290	2	1.428622 0.1545	.	-1.22488 0.2219	-2.67338 0.0081
Female	Younger	5.42105263	3	2.472843 0.0142	1.224882 0.2219	.	-1.09977 0.2726
Female	Older	5.84126984	4	4.118507 0.0001	2.673378 0.0081	1.09977 0.2726	.

Coworker

Sex	Age	STCOWT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	4.55555556	1	.	-1.67756 0.0948	-2.62791 0.0092	-3.56407 0.0004

Male	Older	5.08064516	2	1.677558 0.0948	.	-1.16333 0.2459	-1.87222 0.0625
Female	Younger	5.50000000	3	2.627912 0.0092	1.163329 0.2459	.	-0.46375 0.6433
Female	Older	5.66666667	4	3.564067 0.0004	1.872224 0.0625	0.463749 0.6433	.

Table B.111: Least square means, t-tests and p-values for perceived social support by sex, age and sex by age interactions for all respondents, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Effects				
Perceived Social Support - Spouse/ Significant Other	Males	17.6698565	1.321657	0.1881
	Females	16.6990973		

Perceived Social Support - Friend	Males	14.9482656	-3.68647	0.0003
	Females	17.1576670		

Age Effects

Perceived Social Support - Spouse/ Significant Other	Younger	17.1531409	-0.08533	0.9321
	Older	17.2158128		

Perceived Social Support - Friend	Younger	15.8260399	-0.75727	0.4500
	Older	16.2798926		

Sex by Age Interactions

Perceived Social Support - Spouse/ Significant Others

Sex	Age	PSSCORT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	17.7578947	1	.	0.182246	1.087172	0.878851
					0.8556	0.2786	0.3808
Male	Older	17.5818182	2	-0.18225	.	0.989698	0.763068
					0.8556	0.3238	0.4465
Female	Younger	16.5483871	3	-1.08717	-0.9897	.	-0.27239
					0.2786	0.3238	0.7857
Female	Older	16.8498074	4	-0.87885	-0.76307	0.272388	.
					0.3808	0.4465	0.7857

Perceived Social Support - Friend

Sex	Age	PSFSCOT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	14.3328947	1	.	-1.56118	-3.28966	-3.15885
					0.1204	0.0012	0.0019
Male	Older	15.5636364	2	1.561181	.	-2.06045	-1.83009

				0.1204		- 0.0409	0.0691
Female	Younger	17.3191851	3	3.289656	2.060453	.	0.357762
				0.0012	0.0409		0.7210
Female	Older	16.9961489	4	3.158849	1.830092	-0.35776	.
				0.0019	0.0691	0.7210	

Table B.112: Least square means, t-tests and p-values for SCL-90 subscales by sex, age and sex by age interactions for all respondents, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Effects				
Somatization	Males	0.42285692	-1.6239	0.1058
	Females	0.54645713		
Depression	Males	0.85745240	-2.62397	0.0093
	Females	1.11920744		
Anxiety	Males	0.51498542	-2.87114	0.0045
	Females	0.77750207		
Hostility	Males	0.82829871	0.654166	0.5137
	Females	0.75947753		

Age Effects

Somatization	Younger	0.62942389	3.804001	0.0002
	Older	0.33989015		
Depression	Younger	1.18739396	3.991042	0.0001
	Older	0.78926589		
Anxiety	Younger	0.80913289	3.563034	0.0005
	Older	0.48335460		
Hostility	Younger	1.06055280	5.069459	0.0001
	Older	0.52722344		

Sex by Age Interaction

Somatization

Sex	Age	SOMT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	4
Male	Younger	0.51661779	1	.	1.853032	-1.98396	1.660417
					0.0652	0.0485	0.0983
Male	Older	0.32909605	2	-1.85303	.	-3.59781	-0.21333
					0.0652	0.0004	0.8313
Female	Younger	0.74222999	3	1.983957	3.597811	.	3.44312
					0.0485	0.0004	0.0007
Female	Older	0.35068426	4	-1.66042	0.213328	-3.44312	.
					0.0983	0.8313	0.0007

Depression

Sex	Age	DEPT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Younger	1.02781224	1	.	2.568921 0.0109	-2.14143 0.0333	1.041199 0.2989
Male	Older	0.68709257	2	-2.56892 0.0109	.	-4.38467 0.0001	-1.54071 0.1248
Female	Younger	1.34697567	3	2.141435 0.0333	4.384667 0.0001	.	3.056433 0.0025
Female	Older	0.89143921	4	-1.0412 0.2989	1.54071 0.1248	-3.05643 0.0025	.

Anxiety

Sex	Age	ANXT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Younger	0.64390681	1	.	2.12101 0.0351	-2.41899 0.0164	0.526963 0.5988
Male	Older	0.38606403	2	-2.12101 0.0351	.	-4.2648 0.0001	-1.60062 0.1109
Female	Younger	0.97435897	3	2.418993 0.0164	4.264803 0.0001	.	2.882085 0.0043
Female	Older	0.58064516	4	-0.52696 0.5988	1.600621 0.1109	-2.88208 0.0043	.

Hostility

Sex	Age	HOST1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Younger	1.14247312	1	.	4.492178 0.0001	1.042356 0.2984	4.359261 0.0001
Male	Older	0.51412429	2	-4.49218 0.0001	.	-2.92661 0.0038	-0.1873 0.8516
Female	Younger	0.97863248	3	-1.04236 0.2984	2.926615 0.0038	.	2.788532 0.0058
Female	Older	0.54032258	4	-4.35926 0.0001	0.187296 0.8516	-2.78853 0.0058	.

Table B.113: Least square means, t-tests and p-values for Ways of Coping subscales by sex, age and sex by age interactions for all respondents, Comfort study, time 1.

Construct	Subgroup	Lsmeans	T-test	P-value
Sex Effects				
Confrontive	Males	1.10190918	2.281203	0.0236
	Females	0.92550444		
Distancing	Males	1.26590987	1.597645	0.1117
	Females	1.15100888		
Self Control	Males	1.39842253	-0.4893	0.6252
	Females	1.43576617		
Seeking Social Support	Males	1.30065359	-0.89121	0.3739
	Females	1.36928975		
Accepting Responsibility	Males	1.01870485	2.506637	0.0130
	Females	0.77802663		
Escape Avoidance	Males	1.06153251	-1.38107	0.1688
	Females	1.17424334		
Planful Problem Solving	Males	1.59545924	1.962634	0.0511
	Females	1.43579500		
Positive Reappraisal	Males	1.41972579	-0.57695	0.5646
	Females	1.46962989		
Age Effects				
Confrontive Coping	Younger	1.11139122	2.526439	0.0123
	Older	0.91602240		
Distancing	Younger	1.22376284	0.425575	0.6709
	Older	1.19315591		
Self	Younger	1.43365346	0.433932	0.6648

Control	Older	1.40053524		
Seeking Social Support	Younger	1.41335201	2.035474	0.0431
	Older	1.25659134		
Accepting Responsibility	Younger	0.94971989	1.069695	0.2861
	Older	0.84701160		
Escape Avoidance	Younger	1.26551120	3.617717	0.0004
	Older	0.97026464		
Planful Problem Solving	Younger	1.46083100	-1.34714	0.1795
	Older	1.57042323		
Positive Reappraisal	Younger	1.49011605	1.050644	0.2947
	Older	1.39923962		

Sex by Age Interaction

Confrontive Coping

Sex	Age	MCONFCT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	1.24183007	1	.	2.699148 0.0076	2.209584 0.0283	3.614905 0.0004
Male	Older	0.96198830	2	-2.69915 0.0076	.	-0.16418 0.8698	0.920246 0.3586
Female	Younger	0.98095238	3	-2.20958 0.0283	0.164177 0.8698	.	0.966307 0.3351
Female	Older	0.87005650	4	-3.6149 0.0004	-0.92025 0.3586	-0.96631 0.3351	.

Distancing

Sex	Age	MDISTT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	1.38562092	1	.	2.483027 0.0139	2.948091 0.0036	1.521276 0.1298
Male	Older	1.14619883	2	-2.48303 0.0139	.	0.784659 0.4336	-1.01082 0.3133
Female	Younger	1.06190476	3	-2.94809 0.0036	-0.78466 0.4336	.	-1.66967 0.0966
Female	Older	1.24011299	4	-1.52128 0.1298	1.010816 0.3133	1.669669 0.0966	.

Self Control

Sex	Age	MSELC1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T| i/j 1 2 3 4				
Male	Younger	1.45098039	1	.	1.027267 0.3055	0.29739 0.7665	-0.04163 0.9668
Male	Older	1.34586466	2	-1.02727 0.3055	.	-0.61807 0.5372	-1.10898 0.2688
Female	Younger	1.41632653	3	-0.29739 0.7665	0.618069 0.5372	.	-0.34326 0.7318
Female	Older	1.45520581	4	0.041628 0.9668	1.108978 0.2688	0.343257 0.7318	.

Seeking Social Support

Sex	Age	MSESST1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Younger	1.37908497	1	.	1.519179	-0.58285	0.860379
					0.1303	0.5607	0.3906
Male	Older	1.22222222	2	-1.51918	.	-1.95931	-0.69089
				0.1303		0.0515	0.4904
Female	Younger	1.44761905	3	0.582848	1.959313	.	1.370657
				0.5607	0.0515		0.1720
Female	Older	1.29096045	4	-0.86038	0.690894	-1.37066	.
				0.3906	0.4904	0.1720	

Accepting Responsibility

Sex	Age	MACRET1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T| i/j 1 2 3 4				
Male	Younger	1.06372549	1	.	0.69945 0.4851	1.555359 0.1215	2.689073 0.0078
Male	Older	0.97368421	2	-0.69945 0.4851	.	0.961981 0.3372	2.042452 0.0424
Female	Younger	0.83571429	3	-1.55536 0.1215	-0.96198 0.3372	.	0.80968 0.4191
Female	Older	0.72033898	4	-2.68907 0.0078	-2.04245 0.0424	-0.80968 0.4191	.

Escape Avoidance

Sex	Age	MESAVT1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) / Pr > |T|				
			i/j	1	2	3	4
Male	Younger	1.25245098	1	.	3.489702 0.0006	-0.20963 0.8342	1.681753 0.0942
Male	Older	0.87061404	2	-3.4897 0.0006	.	-3.34651 0.0010	-1.89036 0.0602
Female	Younger	1.27857143	3	0.209628 0.8342	3.346509 0.0010	.	1.722769 0.0865
Female	Older	1.06991525	4	-1.68175 0.0942	1.890358 0.0602	-1.72277 0.0865	.

Planful Problem Solving

Sex	Age	MPLPRST1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	1.53594771	1	.	-1.09125	1.209534	0.462798
					0.2765	0.2279	0.6440
Male	Older	1.65497076	2	1.091248	.	2.215774	1.608967
				0.2765		0.0278	0.1092
Female	Younger	1.38571429	3	-1.20953	-2.21577	.	-0.82962
				0.2279	0.0278		0.4078
Female	Older	1.48587571	4	-0.4628	-1.60897	0.829618	.
				0.6440	0.1092	0.4078	

Positive Reappraisal

Sex	Age	MPORET1 Lsmean	T for H0: Lsmean(i)=Lsmean(j) i/j	1	2	3	Pr > |T| 4
Male	Younger	1.49859944	1	.	1.360276	0.128477	0.356172
					0.1753	0.8979	0.7221
Male	Older	1.34085213	2	-1.36028	.	-1.08962	-1.04505
				0.1753		0.2772	0.2973
Female	Younger	1.48163265	3	-0.12848	1.089618	.	0.187009
				0.8979	0.2772		0.8518
Female	Older	1.45762712	4	-0.35617	1.045054	-0.18701	.
				0.7221	0.2973	0.8518	

Chapter 2

DISASTER-RELATED RELOCATION:
MILITARY WOMEN & MEN IN THE WAKE
OF HURRICANE ANDREW

Carol S. Fullerton, Robert J. Ursano & Leming Wang

Chapter 2

DISASTER-RELATED RELOCATION: MILITARY WOMEN & MEN IN THE WAKE OF HURRICANE ANDREW

Carol S. Fullerton, Robert J. Ursano & Leming Wang

*H*urricane Andrew began as a group of thunderstorms over western Africa on approximately August 13, 1990. It grew in intensity, being classified as a tropical he storm on Monday, August 17. Andrew reached hurricane strength on Saturday, August 22. By Sunday, August 23, Andrew's winds were clocked up to 150 miles per hour. Andrew touched shore on the Bahamas Sunday night, killing four people. Hurricane Andrew hit the coast of Florida at approximately 5:00 a.m. on Monday, August 24th. Hurricane Andrew reached sustained winds of 145 mph with gusts of 175-200 mph. Because of advanced warning, most people evacuated; 43 individuals were killed by Andrew, however. Property damage has been estimated to be 30 billion dollars. The American Red Cross estimated that 30,000 families were affected were directly affected by Andrew.

The military has a strong interest in the effects of trauma and disaster on individuals and groups. Historically, a great deal of what has been learned about human responses to traumatic situations has derived from studies of combat veterans. As the military's mission has been reevaluated, suggestions have been made that the military play an expanded role in disaster relief. Several experts testified to a Senate subcommittee that the Department of Defense should be given a greater role in the government's handling of natural catastrophes, taking over some of the Federal Emergency Management Agency's (FEMA) functions (Washington Post, Thursday, January 28, 1993, pg. A19). Military units have been deployed to assist in relief efforts following Hurricane Andrew and for war-torn Somalia. The UN General Assembly Resolution 42/169, adopted on 11 December 1987, designated the 1990s as a decade for natural disaster reduction (WHO, 1992).

Natural disasters are common, costly, and traumatic. In the United States alone, 531 major natural disasters occurred during 1965-1985 (Rubin, Yezer, Hussain, & Webb, 1986). Although the costs are difficult to estimate, they include property losses, disaster relief, lost income, and health care costs. Direct federal

assistance from the Federal Emergency Management Agency (FEMA) was over \$6 billion between 1965 and 1985. It is estimated that in the year 2000 over 1,700 deaths will occur in the United States due to major disasters alone and property and income loss will total more than \$17 billion.

The 1990s:

A DECADE for
the REDUCTION of
NATURAL DISASTERS.

World Health Organization (1992)

In the world today, natural disasters rapidly become large-scale media events as they unfold before our eyes. Multiple factors contribute to this wide-spread attention, for example, the sheer magnitude of the disaster event and the cataclysmic effects on large numbers of people simultaneously, the effects last far longer than the actual event (e.g., in a matter of minutes an earthquake can produce devastation that can last a lifetime), when needs exceed resources available many disaster workers and others become part of the recovery environment, the steep financial toll, and the "on the spot" graphic media coverage.

The attention to natural disasters notwithstanding, empirical research is uneven. Sources of inconsistency in trauma research can be traced to multiple causes, for example: differences in disaster types and severity (i.e., no two disasters

are alike), and methodologic variations, for example: Differences in attribution between natural versus human-made disasters (Baum, 1984, 1993; Warheit, 1976), disaster severity, (Bromet & Schulberg, 1986; Ursano, 1987), the use of clinical populations, unstandardized measures or measures normed using combat exposed populations, variations in definition of "chronic," difficulty in obtaining control or comparison groups. The direction of trauma research includes: epidemiologic studies of community samples, the use of standardized measures to facilitate generalization and replication, and find creative ways to obtain control groups (for reviews see, Baum, Solomon, & Ursano, 1990; Bromet & Schulberg, 1987; Green, 1991).

The continental United States has been buffeted by two major hurricanes in the past two decades, Hugo (1988) and Andrew (1992). The ability to predict hurricanes has decreased morbidity and mortality in developed countries. However, even with advanced warning, property loss remains high. Consequently, while loss of life has become relatively infrequent, thousands of families must face the stress of losing their homes and the problems of dislocation and relocation. Additionally, large scale destruction of communities also results in loss of jobs with subsequent financial ramifications.

As an outgrowth of our U.S. Air Force consultation team deployed to assist the victims of Hurricane Andrew. We examined the acute and long-term impacts in the active duty women and men who relocated from Homestead AFB as Hurricane Andrew descended upon the region. This paper presents some preliminary results on the responses in active duty women and men to the stress and trauma of rapid, unexpected relocation, loss of home and community. We begin with a brief review of the nature and severity of stressors, the psychological and health effects of post-traumatic stress, some preliminary findings and consultation to disaster recommendations and/or lessons learned.

NATURE & SEVERITY OF THE STRESSOR

It is exceedingly difficult to tease out the impact of specific disaster stressors, for example: threat to life, loss of home, loss of support networks, job loss, etc. These stressors interact with the severity or intensity of the disaster to affect health outcome, along with personality, biological and environmental factors. Participation in combat, body counts, and seeing friends killed make traumatic experiences more aversive (Lauger et al, 1985; Rosenheck; Wilson & Krauss, 1982). Breslau and Davis (1987) found that the rate of PTSD for those who participated in atrocities was 100%. Card (1983) found that PTSD symptoms could be predicted almost completely by the intensity of combat. Similarly, Foy et al. (1984) using multiple regression analysis to examine a number of variables found that the level of combat was the best predictor of symptom formation (also see, Kadushin et al, 1981; Fry &

Stockton, 1982; Friedman et al, 1986; Solkoff et al, 1986). In an early study of the long-term effects of Cyclone Tracy on the Australian community of Darwin, Milne (1977) found that respondents who had stayed in Darwin rather than being evacuated, fared best in the post-disaster recovery period, while respondents who did not return to Darwin did worse. The difference in psychological responses was attributed to the social support networks afforded to those who remained.

PSYCHOLOGICAL EFFECTS OF POST-TRAUMATIC STRESS

Breslau et al. (1991) estimated the lifetime prevalence of exposure to traumatic events at 39.1% in a random sample of 1007 young adults from a large health maintenance organization in Detroit, Michigan. The rate of PTSD in those who were exposed was 23.6%. Chronic PTSD, symptoms persisting for one year or more, were reported by 57% of those who met the PTSD criteria reported (Breslau & Davis, 1992). Other studies have reported the persistence of symptoms lasting for 3 years or longer, e.g., in 53% of combat veterans, and 41% of women who had been physically attacked (Helzer, 1987). Norris (1987) estimated that 6-7% of the United States population are exposed to a disaster or traumatic events each year -- ranging from hurricanes and tornados to motor vehicle accidents and crime. In a representative sample of women over the age of 18 in the United States, Kilpatrick (1992) found that 68.9% had been exposed to a traumatic event at sometime in their life.

Intrusive thoughts and avoidance of reminders of trauma are the classic symptoms of posttraumatic stress (Horowitz, 1979). These symptoms are the core of posttraumatic stress disorder (PTSD; DSM-III-R, American Psychiatric Association, 1987) and also highlight the role of memory in response to trauma. Horowitz (1976) made an important contribution by elaborating on these two types of responses. He identified several additional symptoms reported by trauma victims: fear of a repetition of the stressful event, shame over helplessness or emptiness, rage at the source of the stress, guilt or shame over aggressive impulses, fear of identification or merger with the victims and sadness over loss.

Although PTSD has been the traumatic disorder most often studied in recent years, it is not the only psychiatric disorder to follow traumatic events. Major depression, generalized anxiety disorder, and substance abuse are also well documented after exposure to traumas and disasters (for review see, Davidson & Fairbank, 1992; Kulka et al., 1990; Karem, 1991; Rundell et al., 1989). Comorbidity is common with PTSD. Major depression, anxiety disorders, and alcoholism often coexist with PTSD in the general population (Breslau et al, 1991; Davidson et al, 1992; Helzer et al., 1987), and among veterans (Behar, 1984; Breslau & Davis, 1987a; Escobar et al, 1983; Green et al., 1989; Helzer et al., 1987; Kulka et al, 1990; Roszell et al, 1991; Shalev et al, 1990; Sierles et al.,

1986). In general population-based epidemiological studies of PTSD (for review see, Davidson & Fairbank, 1992), 62-92% of the population with PTSD have had previous or concurrent psychiatric disorder (Davidson et al, 1992; Helzer et al., 1987; Shore et al., 1989), compared to only 15-33% of non-PTSD comparison groups (Davidson et al, 1992; Helzer et al., 1987). Shalev et al's (1990) findings highlight the importance of cigarette abuse among individuals with PTSD, an often forgotten substance of abuse.

TRAUMATIC STRESS & HEALTH BEHAVIORS

A relationship between traumatic stress and adverse health behaviors, has been suggested both in community samples (Gleser, Green, & Wingt, 1981; Helzer, Robins, & McEnvoi, 1987) and veteran samples (Card, 1987; Shalev, Bleich, & Ursano, 1990). Helzer et al. (1987) found those in the general population with PTSD were at increased risk for drug and alcohol abuse. In a sample of Buffalo Creek disaster victims, Gleser et al. (1981) found a 44% increase in cigarette smoking, a 52% increase in the use of prescription drugs, and increased alcohol consumption. Waigandt et. al's (1990) 2 year follow-up of 51 rape victims (mean age = 30) found significant, disaster specific differences between the victims and the matched controls in perceived current health status. Fewer assault victims reported "excellent health" than did nonvictims, and more victims reported "fair" or "poor" health than did nonvictims. Significant differences between victims and nonvictims were found in negative health behaviors (lack of exercise, excessive caffeine or alcohol consumption, and cigarette smoking). The victims had 50% more negative health behaviors than did control subjects.

CONSULTATION TO HURRICANE ANDREW

THE DISASTER

Hurricane Andrew, one of the largest natural disasters to occur in the United States, struck the coast of South Florida and coastal Louisiana leaving behind damage and destruction of cataclysmic proportions. People living in the Homestead AFB community experienced disaster threat, extreme property loss, rapid disaster-related evacuation from the Homestead area, placement in temporary housing and subsequent relocation. The Homestead community, however, provided excellent support for the families, e.g., evacuation assistance, temporary housing, job and income security, choice of relocation and health care..

HURRICANE ANDREW: The Facts

- ♦ 24 August 1992
- ♦ 30 mile wide swath cut across Southern FL
- ♦ Sustained winds of 145 gusts to 175 mph
- ♦ 43 deaths
- ♦ 90,000 homes destroyed
- ♦ 160,000 people left homeless
- ♦ Damages estimated at 30 billion
- ♦ 1500 families evacuated: Homestead AFB temporary housing, MacDill AFB & vicinity, Tampa

THE CONSULTATION

Hurricane Andrew Mental health consultation to MacDill AFB was requested by the Air Combat Command Surgeon. The Uniformed Services University of the Health Sciences (USUHS) Department of Psychiatry Center for Traumatic Stress Studies deployed a Psychiatrist within 48 hours post-disaster. Close phone contact was maintained with members of the trauma studies group. The goal was to provide emotional and practical assistance and facilitate the recovery of evacuees from Homestead AFB, and personnel at MacDill AFB.

SUPPORT & ASSISTANCE PROVIDED TO:

- * Families evacuated from Homestead AFB
- * Hospital Commander
- * Mental Health Personnel
- * Family Support Center Personnel
- * Child Care Center Staff
- * Chaplains
- * Red Cross Staff

THE STUDY

As an outgrowth of our U.S. Air Force consultation team deployed to assist the victims of Hurricane Andrew we examined the acute and long-term impacts in

the active duty women and men who experienced sudden, traumatic relocation of home and family as Hurricane Andrew decended on the region. We followed our study groups for 38 months post-hurricane at four separate assessment points. research follow-up and recruited two matched comparison groups of adults and adolescents exposed to job-related relocation. This preliminary report focuses on the active duty women and men during the week of the hurricane and 8 months after the hurricane.

We examined the differential gender-related effects of natural disaster and rapid evacuation on the psychological and physical health in active duty women and men from Homstead Air Force Base in the wake of Hurricane. We had the unique opportunity to study the posttraumatic stress of adults and adolescents from the Homstead Air Force Base community following Hurricane Andrew. Concurrently, we recruited two matched comparison groups of adults and adolescents exposed to job-related relocation we examined the acute and long-term psychological responses in the evacuated military families of Homstead AFB. This study had several methodological advantages, e.g., our experimental and comparison groups were willing to participate in our long-term study and understood the importance of our work, we were consistent in our measurement techniques across groups and across time, and we began our study shortly after the hurricane in order to assure an adequate window to assess long-term outcome.

MILITARY WOMEN AND DISASTER: QUESTIONS OF IMPORT

1. What are the stressors associated with Hurricane Andrew by active duty women and by active duty men?

Define the nature of the stressor (e.g., rapid relocation).

2. What are the differential gender-related effects of Hurricane Andrew on the health (psychological, physiological, social and coping behaviors) in active duty women and men evacuated from Homstead Air Force Base.

Examine the health-related differences in military women and men associated with natural disasters.

3. What are the differential effects of disaster-related relocation and permanent change of station (PCS) on health (psychological, physiological, social and coping behaviors) in active duty women evacuated from Homstead Air Force Base due to Hurricane Andrew and active duty women whose PCS was Shaw AFB or McDill AFB.

Examine the health effects of 2 types of relocation, i.e., disaster-related evacuation and PCS in military women.

SUBJECTS

The hurricane group compared to the two control groups demographically. 90.5% of the hurricane active duty members were male; 97.2% of the SSOs were female; and 35.2% of the adolescent hurricane group was male, 64.8% female. The hurricane group ranged in age from 27 to 50 years old for the active duty members, 20 to 65 years old for the SSOs, and 12 to 19 for the hurricane group adolescents. The mean ages for the hurricane group were 37.1 (SD=4.4) for active duty, 35.6 (SD=6.4) for SSOs, and 15.5 (SD=2.2) for the adolescents. The majority of the hurricane group was White. Of the active duty members 68.5% were White, 14.5% were Black, 13.3% were Hispanic, and 1.2% (N=3) were Asian; 68.8% of the SSOs were White, 13.2% were Black, 9.0% were Asian, and 6.9% were Hispanic; 60.4% of the adolescents were White, 18.9% Black, 13.2% Hispanic, and 5.7% Asian. All of the hurricane group active duty members were Noncommissioned Officers (NCOs), 45.3% were Tech Sergeants, 43.2% were Master Sergeants, 5.8% (N=14) were Senior Master Sergeants, and 5.8% were Chief Master Sergeants. The majority of the hurricane group was married, 85.6% of the active duty members and 97.2% of the SSOs. All of the active duty members had completed at least high school while 76.8% had attended some college and 14.5% had a Bachelor's degree; nearly all (97.1%) of the SSOs had completed at least high school, while 49.3% had attended some college, and 15.9% had at least a Bachelor's degree. The hurricane adolescents ranged in education from the 5th grade to 2nd year college students, 48.1% were in the 8th grade or lower, 46.3% were in high-school (9th to 12th grades), and 5.6% attended some college.

There were no significant differences on demographics between Shaw AFB and MacDill AFB, therefore the demographic data was combined. 88.5% of the comparison active duty members were male, 93.8% of the SSOs were female; and 46.9% of the adolescent comparison group was male, 53.1% female. The comparison groups ranged in age from 27 to 50 years old for the active duty members

The mean ages for the comparison groups were 36.5 (SD=4.2) for active duty, 34.9 (SD=5.2) for SSOs, and 15.8 (SD=1.5) for the adolescents. The majority of the comparison group was White. Of the active duty members 79.0% were White, 14.5% were Black, 2.9% were Hispanic, and 1.4% (N=2) were Asian; 83.5% of the SSOs were White, 8.9% were Black, 2.5% were Asian, and 2.5% were Hispanic; 78.1% of the adolescents were White, 15.6% Black, and 6.3% Hispanic. All of the comparison group active duty members were Noncommissioned Officers (NCOs), 49.6% were Tech Sergeants, 35.3% were Master Sergeants, 9.4% (N=13) were Senior Master Sergeants, and 50.8% (N=7) were Chief Master Sergeants. The majority of the comparison group was married, 84.2% of the active duty members and all (100.0%) of the SSOs. All of the active duty members had completed at least high school while 77.7% had attended some

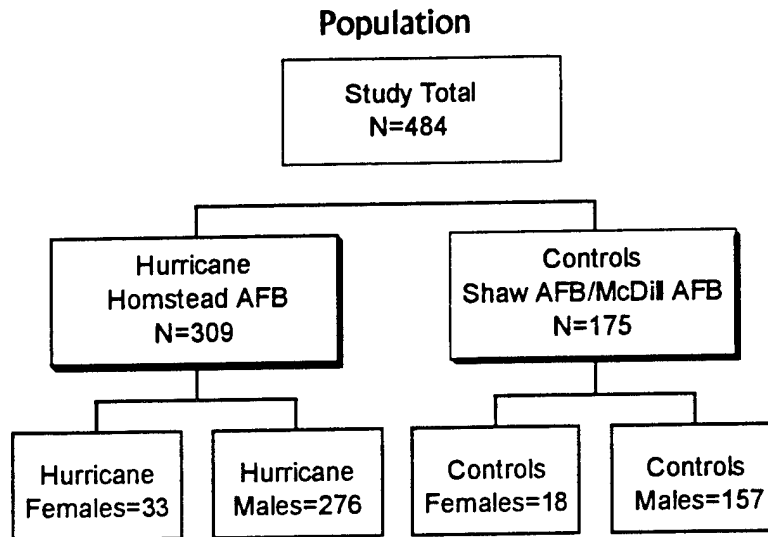
college and 15.1% had at least a Bachelor's degree; nearly all (95.0%) of the SSOs had completed at least high school, while 46.3% had attended some college, and 13.8% had at least a Bachelor's degree. The comparison adolescents ranged in education from the 6th grade to 12 grade, 25.1% were in the 8th grade or lower, 74.9% were in high-school (9th to 12th grades). Men and women at each site were very similar, although women were more likely to be single and more likely to be a single parent.

PROCEDURES

Questionnaires were administered approximately 8 months after Hurricane Andrew (questionnaires mailed March 19-29, 1993, see section B. Recruitment). All data were collected without names or identifiers. Of the original 755 Homestead AFB active duty members and their families that we attempted to reach, 25 were ineligible (not stationed at Homestead AFB during Hurricane Andrew). 279 (38.2%) active duty members completed and returned their questionnaires, the median date for returning the questionnaire was 8 months post Hurricane or April 19, 1993. Of the original 318 Shaw AFB active duty members and their families that we attempted to reach, 8 were ineligible (PCSed before our cut-off date). 90 (29.0%) active duty members completed and returned their questionnaires, the median date for returning the questionnaire was 8 months post Hurricane or April 26, 1993. Of the original 212 MacDill AFB active duty members and their families that we attempted to reach, 4 were ineligible (PCSed before our cut-off date). 72 (34.6%) active duty members completed and returned their questionnaires, the median date for returning the questionnaire was 8 months post Hurricane or April 12, 1993.

In our initial data collection to examine acute responses to Hurricane Andrew, letters of introduction were mailed to active duty members (senior NCOs, E-6 and above) at all three sites approximately 2 weeks prior to sending the Questionnaires. The letter described our study, our affiliation, our process to assure confidentiality and the volunteer agreement. The questionnaire packets, which included volunteer consent forms, were mailed from March 19 - 29, 1993. The packets contained three surveys (for active duty, spouse/significant others and oldest adolescent living at home, if applicable) and self-addressed mailing envelopes for return of each questionnaire separately. The median date when questionnaires were completed was approximately April 26, 1993, about 8 months after Hurricane Andrew. Questionnaire return rates were 72.3% from Homestead, 61.0% from McDill and 43.5% from Shaw (of those who received questionnaires and met the criteria for inclusion). Follow-up letters were sent approximately 3 weeks after the packet mailings. Follow-up phone calls were made at random to estimate responses to the questionnaires and rates of receiving the packets. If a packet was not received or lost, a new packet was mailed. Several weeks later thank-you (for

participation) letters are sent and reminders to complete and mail the questionnaire if applicable. This step is repeated approximately 3 weeks later.



RECRUITMENT

We used USAF personnel rosters to recruit our hurricane and comparison groups. We recruited active duty members, their spouse/significant other (SSO), and their oldest adolescent child (if any). Our study group were at Homestead AFB at the time of the hurricane (August 1992) and were reassigned from Homestead AFB to the continental United States after the hurricane struck and destroyed Homestead AFB. We selected Shaw AFB, SC and MacDill AFB, Tampa, FL for recruiting our comparison groups to Homestead AFB in size and mission. All three bases were fighter squadrons. In order to maximize the number of active duty families with adolescents living at home, we recruited only senior Non-Commissioned Officers (NCOs) ranked E-6 (TSgt) and above. In order to control for the effects of routine relocation, only active duty members in the comparison groups who had recently moved to those bases (between September, 1991 and August 31, 1992) were recruited.

The Homestead, MacDill and Shaw samples did not differ significantly on demographics. The Homestead active duty respondents were mostly male (90.5%) and all were NCOs, primarily Tech Sergeants and Master Sergeants aged 27 - 50 (mean = 37.1, SD = 4.4). Over half (68.5%) were Caucasian (14.5% black and 13.3% Hispanic). Most were married (85.6%) and had attended some college (76.8%). The Homestead SSOs were female, aged 20 - 65 (mean = 35.6, SD = 6.4). Half had some college (49.3%) some college. The Homestead adolescents were 35.2% male, 64.8% female. They ranged in age from 12 - 19 years (mean

= 15.5, SD = 2.2). The adolescents were 60.4% Caucasian, 18.9% Black and 13.2% Hispanic. About half of the adolescents (48.1%) were in the 5th - 8th grade and 46.3% were in high-school (a few reported some college, 5.6%)

MEASURES

Psychological Symptomatology. To determine psychological symptomatology one month post-disaster we administered the SCL-90-R (Derogatis, 1983). This self-report checklist inquires about symptoms during the preceding week. The SCL-90 is composed of 90 items that are scored on a 5-point scale: 0 = not at all; 1 = a little bit; 2 = moderately; 3 = quite a bit; 4 = extremely. The SCL-90 provides a global index of symptom reporting, and intensity of distress scores for nine subscales: somatization, obsessive compulsive symptoms, interpersonal sensitivity, depression, anxiety, phobic anxiety, hostility, paranoid ideation, and psychoticism. Reliability coefficients for the subscales range from .84 to .90, and the subscales correlate fairly highly with MMPI scales measuring similar constructs. The SCL-90 has proven useful in other research on disasters and has been administered to a variety of noninstitutionalized samples.

Disaster Specific Psychological Symptomatology. To determine the acute psychological impact of the disaster we administered the Impact of Events Scale (Horowitz et al., 1979). This widely used 15-item self-report scale measures the degree of subjective impact experienced as a result of a specific traumatic event. The IES classifies the effects of stress into two major categories: intrusion and avoidance. These symptoms are central to the diagnosis of post-traumatic stress disorder. Intrusion refers to troublesome thoughts and images, troubled dreams, strong feelings, and repetitive behaviors such as: "I thought about it when I didn't mean to". Avoidance refers to symptoms of psychic numbing, denial of meanings and consequences, behavioral inhibition, or counterphobic activities related to the stressful event: "I stayed away from reminders of it". Items are scored on a 4-point scale: 0 = not at all; 1 = rarely; 2 = sometimes; 3 = often. Means for the total IES, and the intrusion and avoidance subscales are derived. The intrusion and avoidance subscales were found to be associated (correlation of .42) but not measuring identical constructs (Horowitz et al., 1979). The IES has been cross-validated (Zilberg et al., 1982). The item content is highly relevant and the subscales have high internal consistency. The subscales discriminate across populations and detect change over time (Schwarzwald et al., 1987; Zilberg, 1982).

Table 4

SUMMARY OF MEASURES

1. Psychological Symptoms

- A. Impact of Events Scale (intrusion, avoidance, total score)
- B. SCL-90-R:
 - Depression
 - Anxiety
 - Hostility
 - Somatization
 - Global Symptom Index (GSI)

2. Physiologic Arousal

- A. Time to Return to Normal Pace
- B. Fatigue
- C. Sleep Disturbance (hours of sleep)

3. Health Care Utilization

- A. Annual Physical
 - C. Emotional Problems
 - D. Needed Health Care but Not Obtained
-

SYNOPSIS OF MAJOR RESULTS

PSYCHOLOGICAL SYMPTOMS

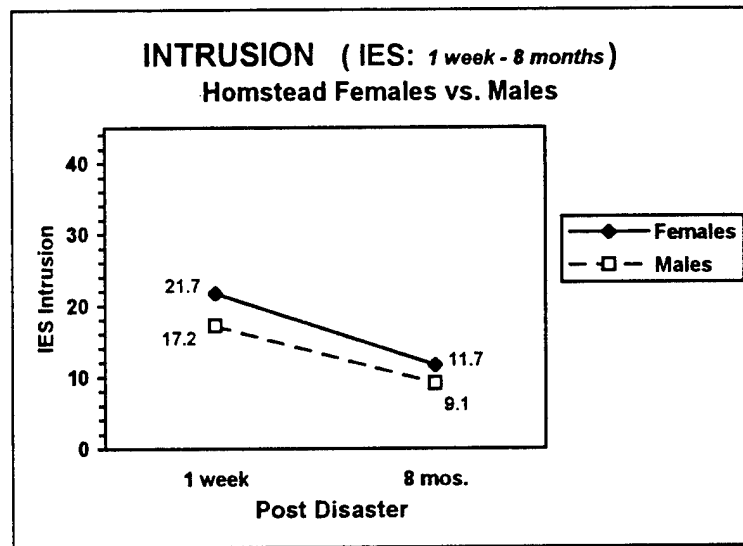
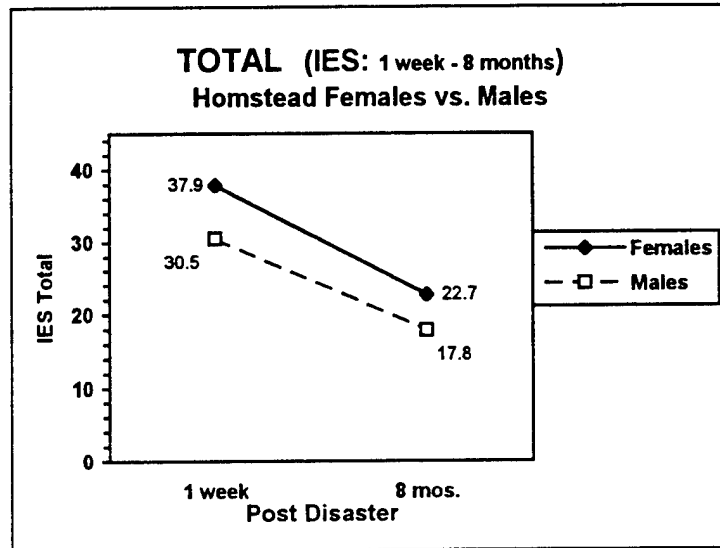
BSI (see Tables 2-1-A to E)

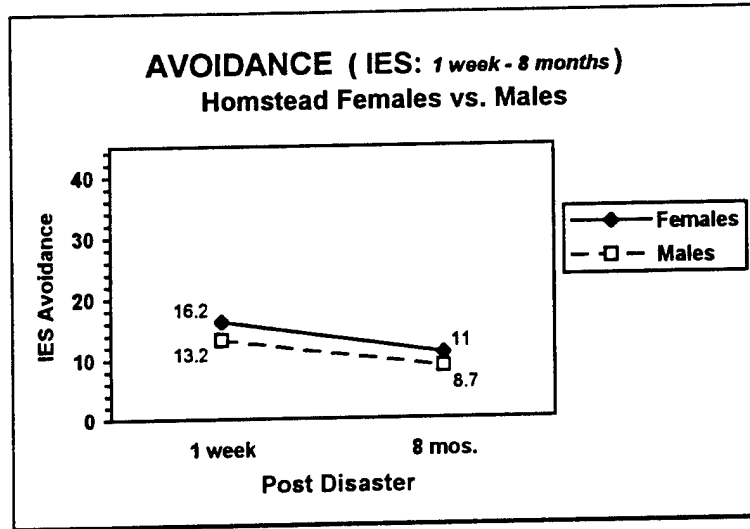
Impact of Events Scale: Disaster-related symptoms (see Tables 2-2-A to E)

Intrusion

Week of disaster: Exposed group (males & females) was significantly higher in symptoms of intrusion than the control group (males & females). Exposed females were significantly higher in symptoms of intrusion than exposed males.

8 months post-disaster: Exposed group (males & females) was significantly higher in symptoms of intrusion than the control group (males & females).





The IES Intrusion, Avoidance, and Total scale score means and standard deviations for the Homstead Active Duty Females, Males and Total (Females + Males) were examined longitudinally, i.e., the week of the disaster and 8 months post-disaster. are Table 1. Horowitz et al. (31) identified thresholds for low, medium, and high symptom levels corresponding to levels of clinical concern using the IES total score (low = < 8.5, medium = 8.6-19.0, and high = > 19.0). Using these criteria, 43.4% at Time 1, 30.8% at Time 2, and 15.8% at Time 3 of the disaster workers were in the high level of clinical concern. For Times 1-3 respectively, 20.7%, 15.4%, and 18.2% were at the medium level.

HEALTH CARE UTILIZATION *(from the disaster - 8 months post-disaster) (see Tables 2-2-A to E)*

Annual Physical. Exposed group (males & females) were not significantly different than the control group (males & females).

Physical Problems. Exposed group (males & females) reported more physical health problems than the control group (males & females). Exposed females reported significantly more physical health problems than exposed males.

Emotional Problems. Exposed group (males & females) reported more emotional problems than the control group (males & females).

Needed Health Care but Not Obtained. Exposed group (males & females) did not differ from the control group (males & females).

PHYSIOLOGIC AROUSAL

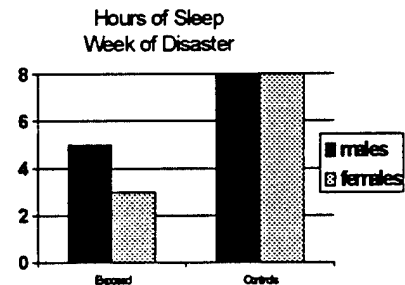
Time to Return to Normal Pace. Exposed group (males & females) took significantly more time to return to normal pace than the control group (males & females). The majority of the control group did not alter usual pace. More of the exposed females took greater than 4 weeks to return to normal pace than did the exposed males.

Fatigue.

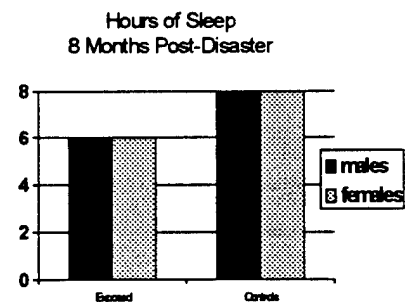
Week of disaster: Exposed group (males & females) was significantly more fatigued than the control group (males & females). Exposed females were significantly more fatigued than exposed males.

Sleep Disturbance (*hours of sleep*)

Week of disaster: Exposed group (males & females) was significantly lower than the control group (males & females). Exposed females were significantly lower than males.



8 months post-disaster: Exposed group (males & females) was significantly lower than the control group (males & females).



DISCUSSION

People in the Homestead group experienced disaster threat, extreme property loss, disaster-related evacuation from the Homestead area, placement in temporary housing and subsequent relocation (see Table 2). In addition, they had excellent support - the best probably ever given such a severe disaster population: no loss of job, income, food or health care. Therefore in many ways they represent one end of the disaster spectrum never before studied. Second, we recruited two matched comparison groups who had job-related relocations, therefore, controlling for the 'normal' stress of relocations. Third, we recruited a study group and two comparison groups of adolescents

Table 2

NATURE of the STRESSOR: HURRICANE ANDREW

- * Unexpected-with short anticipation phase
 - * Evacuation
 - * Rapid Relocation
 - * Affected entire community
 - * Needs exceeded available community resources
 - * Fear of death to self/ family/close friend
 - * Fear of physical injury to self/ family/close friend
 - * Loss/damage to home & personal belongings
 - * Unanticipated separation from family & community
 - * Loss of social support networks
 - * Loss of job (spouse significant other)
 - * Financial uncertainty-insurance claims
 - * Adjustment to new community
-

Importantly, we designed our study to avoid the pitfall that often results from oversimplification in studies limited to the examination of gender *differences*, i.e., comparisons of females and males on given areas. There is a tendency to use men as the norm with which to compare women, i.e., the magnitude of deviation in women from the norm established for men. This "bias" tends to be magnified in empirical studies of environments that are mostly men. The military, a traditionally male dominated culture, has set many of its standards by male performance, preferences and needs. This approach precludes the identification of norms established *within* gender group and can foster - overtly as well as covertly - competition between women and men that favors men. Perhaps, and of greatest import, are the tenacious expectations that often become characterizations and stereotypes. It turns the natural diversity between subgroups in our population into qualitative comparisons that foster alienation and discord between groups. associated with research that compairs women's functioning to that of men. There are a number of excellent articles

and reviews that focus on the prospects and pitfalls from research on the comparison of gender differences in the civilian community (e.g., .), and in the military (e.g.,).

Unlike gender-related research that narrowly focused on a particular area of interest, our research strategy considered the interactions of psychological, behavioral, cognitive, physiological, and social processes. This approach, advocated by Baum and Grunberg (1991), takes into account the interactions of these processes as they occur in a natural setting-not as an isolated aspect of human functioning. Although, some researchers with a narrow focus acknowledge the limitations, many proceed to draw conclusions about gender-related differences in relative isolation of other responses. Unfortunately, these studies result in conclusions about gender-related differences that are misleading at best, and have negative implications for policy decisions.

Importantly in this study some significant gender differences were present, even when the overall responses of males and females, exposed vs. controls were different. Generally, females reported greater fatigue, less sleep and a longer period to recover. Exposed women also more often sought help for physical problems than did men. Exposed women also reported greater intrusive but not avoidant symptoms than exposed men. To what extent these findings represent differences in reporting, differences in biology and/or differences in availability of resources (health care utilization) require specific study.

CONCLUSIONS

Below we suggest some preliminary recommendations for consultation and deployment of a mental health team to disaster. These recommendations are important for planning for deployment and consultation to disaster, however, they highlight an often overlooked aspect of consultation, i.e., the mental health team itself is part of the disaster environment and affected by the associated stressors. The nature of disaster stress on mental health teams is an important area for study of what to expect, how to cope and importantly, how to train teams to recognize and respond to stress in team members.

Recommendations for Deployment & Consultation to Disaster:

- ◇ Establish ongoing consultation teams which train together routinely, so that they are ready when disaster strikes. This facilitates development of the leadership, coordination and communication skills which are critical in responding to disasters.
- ◇ Train these mental health personnel on the process of providing consultation to a disaster, e.g., be flexible to the needs of individuals and groups in the disaster environment, be available and visible, and do not intrude/obstruct the disaster environment.
- ◇ Coordinate with community leaders to assess needs.
- ◇ Alert supervisors to watch for subtle signs of stress such as fatigue and lack of concentration in the several weeks following a disaster.
- ◇ Train leaders to identify people at risk for psychological distress: e.g., evacuees, the bereaved, single parents, disaster workers and their families.
- ◇ Educate individuals/groups about what to expect following the disaster. Discuss responses that may be "normal responses to an abnormal situation". Explain that the process of recovery from the stress of disaster can take months.
- ◇ Facilitate recovery through scheduling work to provide rest and respite.
- ◇ Encourage people to talk about the experience - sharing feelings in debriefing groups can help to "normalize" the experience.
- ◇ Include family members, even the non-exposed, in debriefing groups.
- ◇ Develop collaborative liaisons for future research. Research following disaster is important to learning more about recovery and helping consultation teams respond to those exposed to disaster stress.

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Table 1-1. Demographics-Males vs. Females, Homestead

Variables	Males (N=276)		Female (N=33)		Males and Females (N=309)		Males vs. Females	
	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	DF	χ^2 or T-value
RACE							4	16.905
White	189 ¹	68.7%	20 ¹	62.5%	209	68.1%		0.002
Black	36	13.1%	12	37.5%	48	15.6%		
Asian	5	1.8%	0	0%	5	1.6%		
Hispanic	38	13.8%	0	0%	38	12.4%		
Other	7	2.6%	0	0%	7	2.3%		
RACE by WHITE							1	0.511
White	189 ¹	68.7%	20 ¹	62.5%	209	68.1%		0.474
Non-White	86	31.3%	12	37.5%	98	31.9%		
AGE							307	0.9056
	276	36.9	33	33.1	309	36.8		0.3659
RANK							4	4.649
E-3	1 ¹	0.4%	0 ¹	0%	1	0.3%		0.325
E-6	131	47.6%	19	59.4%	150	48.9%		
E-7	111	40.4%	13	40.6%	124	40.4%		
E-8	17	6.2%	0	0%	17	5.5%		
E-9	15	5.5%	0	0%	15	4.9%		
EDUCATION							3	1.339
HS Finished	26 ¹	9.5%	2 ²	6.5%	28	9.2%		0.720
Some College	213	77.5%	23	74.2%	236	77.1%		
Bachelors Degree	35	12.7%	6	19.4%	41	13.4%		
Masters Degree	1	0.4%	0	0%	1	0.3%		
EDUCATION by COLLEGE DEGREE							1	0.923
Below College	239 ¹	86.9%	25 ²	80.6%	264	86.3%		0.337
College or Up	36	13.1%	6	19.4%	42	13.7%		
MARITAL STATUS							1	7.592
Currently Married	236	85.5%	22	66.7%	258	83.5%		0.006
Not Married	40	14.5%	11	33.3%	51	16.5%		

NUMBER OF CHILDREN		227 ³	2.23	27 ⁴	1.92	254	2.20	39.3	2.13	0.0394
LIVING WITH SSO										
With Spouse		236	85.5%	22	66.7%	258	83.5%	2	9.709	0.008
With Sig. Other		4	1.4%	0	0%	4	1.3%			
No SSO		36	13.0%	11	33.3%	47	15.2%			
SINGLE PARENT										
No		206 ³	90.7%	20 ⁴	74.1%	226	89.0%	1	6.840	0.009
Yes		21	9.3%	7	25.9%	28	11.0%			
SINGLE PARENT LIVING WITH CHILDREN										
Single Parent Living with Children		10 ⁵	50%	7 ⁶	100%	17	63%	1	5.559	0.018
Single Parent Not Living with Children		10	50%	0	0%	10	37%			

1. Information missing on 1 person.
2. Information missing on 2 persons.
3. Information missing or N/A on 49 persons.
4. Information missing or N/A on 6 persons.
5. Information missing or N/A on 256 persons.
6. Information missing or N/A on 26 persons.

Table 1-2. Demographics-Males vs Females, Control (Shaw/MacDill)

Variables	Males (N=157)		Females (N=18)		Males and Females (N=175)		Males vs. Females	
	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	Number of Subject	Percent or Mean	DF	X ² or T-value
RACE								
White	119 ¹	76.8%	14	77.8%	133	76.9%	4	0.934
Black	25	16.1%	3	16.7%	28	16.2%		
Asian	2	1.3%	0	0%	2	1.2%		
Hispanic	5	3.2%	1	5.6%	6	3.5%		
Other	4	2.6%	0	0%	4	2.3%		
RACE by WHITE								
White	119 ¹	76.8%	14	77.8%	133	76.9%	1	0.009
Non-White	36	23.2%	4	22.2%	40	23.1%		
AGE								
	156 ²	36.5	18	36.2	174	36.5	172	0.3284
RANK								
E-1	1 ¹	0.6%	0	0%	1	0.6%	4	1.157
E-6	76	49.0%	9	50%	85	49.1%		
E-7	56	36.1%	7	38.9%	63	36.4%		
E-8	14	9.0%	2	11.1%	16	9.2%		
E-9	8	5.2%	0	0%	8	4.6%		
EDUCATION								
HS Finished	10	6.4%	2	11.1%	12	6.9%	3	1.070
Some College	120	76.4%	13	72.2%	133	76.0%		
Bachelors Degree	23	14.6%	3	16.7%	26	14.9%		
Masters Degree	4	2.5%	0	0%	4	2.3%		
EDUCATION by COLLEGE DEGREE								
Below College	130	82.8%	15	83.3%	145	82.9%	1	0.003
College or Up	27	17.2%	3	16.7%	30	17.1%		
MARITAL STATUS								
Currently Married	139	88.5%	9	50.0%	148	84.6%	1	18.378
Not Married	18	11.5%	9	50.0%	27	15.4%		

Table 1-3. Demographics - Males and Females, Homestead vs MacDill/Shaw

Variables	Homestead (N = 309)		MacDill/Shaw (N = 175)		Homestead and MacDill/Shaw (N = 484)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	DF	χ^2 or T-value
RACE							4	10.976
White	209 ¹	68.1%	133 ¹	76.9%	342	71.3%		0.027
Black	48	15.6%	28	16.2%	76	15.8%		
Asian	5	1.6%	2	1.2%	7	1.5%		
Hispanic	38	12.4%	6	3.5%	44	9.2%		
Other	7	2.3%	4	2.3%	11	2.3%		
RACE by WHITE							1	4.183
White	209 ¹	68.1%	133 ¹	76.9%	342	71.3%		0.041
Non-White	98	31.9%	40	23.1%	138	28.8%		
AGE							481	0.7347
	309	36.8	174 ²	36.5	483	36.7		0.4629
RANK							5	5.021
E-1	0 ¹	0%	1 ¹	0.6%	1	0.2%		0.413
E-3	1	0.3%	0	0%	1	0.2%		
E-6	150	48.9%	85	49.1%	235	49.0%		
E-7	124	40.4%	63	36.4%	187	39.0%		
E-8	17	5.5%	16	9.2%	33	6.9%		
E-9	15	4.9%	8	4.6%	23	4.8%		
EDUCATION							3	5.002
HS Finished	28 ³	9.2%	12	6.9%	40	8.3%		0.172
Some College	236	77.1%	133	76.0%	369	76.7%		
Bachelors Degree	41	13.4%	26	14.9%	67	13.9%		
Masters Degree	1	0.3%	4	2.3%	5	1.0%		
EDUCATION by COLLEGE DEGREE							1	1.021
Below College	264 ³	86.3%	145	82.9%	409	85.0%		0.312
College or Up	42	13.7%	30	17.1%	72	15.0%		

Table 1-4. Demographics - Males, Homestead vs. MacDill/Shaw

Variables	Homestead (N=276)		MacDill/Shaw (N=157)		Homestead and MacDill/Shaw (N=433)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	DF	χ^2 or T-value
RACE							4	12.833
White	189 ¹	68.7%	119 ²	76.8%	308	71.6%		0.012
Black	36	13.1%	25	16.1%	61	14.2%		
Asian	5	1.8%	2	1.3%	7	1.6%		
Hispanic	38	13.8%	5	3.2%	43	10.0%		
Other	7	2.5%	4	2.6%	11	2.6%		
RACE by WHITE							1	3.159
White	189 ¹	68.7%	119 ²	76.8%	308	71.6%		0.076
Non-White	86	31.3%	36	23.2%	122	28.4%		
AGE	276	36.9	156 ¹	36.5	432	36.7	430	0.7883
								0.4310
RANK							5	3.969
E-1	0 ¹	0%	1 ²	0.6%	1	0.2%		0.554
E-3	1	0.4%	0	0%	1	0.2%		
E-6	131	47.6%	76	49.0%	207	48.1%		
E-7	111	40.4%	56	36.1%	167	38.8%		
E-8	17	6.2%	14	9.0%	31	7.2%		
E-9	15	5.5%	8	5.2%	23	5.3%		
EDUCATION							3	5.549
HS Finished	26 ¹	9.5%	10	6.4%	36	8.3%		0.136
Some College	213	77.5%	120	76.4%	333	77.1%		
Bachelors Degree	35	12.7%	23	14.6%	58	13.4%		
Masters Degree	1	0.4%	4	2.5%	5	1.2%		
EDUCATION by COLLEGE DEGREE							1	1.353
Below College	239 ¹	86.9%	130	82.8%	369	85.4%		0.245
College or Up	36	13.1%	27	17.2%	63	14.6%		

NUMBER OF CHILDREN	138 ³	2.34	10 ⁴	1.90	148	2.31	146	1.4604	0.1463
LIVING WITH SSO									
With Spouse	139	88.5%	9	50.0%	148	84.6%	2	23.380	0.000
With Sig. Other	0	0%	1	5.6%	1	0.6%			
No SSO	18	11.5%	8	44.4%	26	14.9%			
SINGLE PARENT									
No	127 ³	92%	8 ⁴	80.0%	135	91.2%	1	1.684	0.194
Yes	11	8.0%	2	20.0%	13	8.8%			
SINGLE PARENT LIVING WITH CHILDREN									
Single Parent Living with Children	1 ⁵	9.1%	2 ⁶	100%	3	23.1%	1	7.879	0.005
Single Parent Not Living with Children	10	90.9%	0	0%	10	76.9%			

1. Information missing on 2 persons.
2. Information missing on 1 persons.
3. Information missing or N/A on 19 persons.
4. Information missing or N/A on 8 persons.
5. Information missing or N/A on 146 persons.
6. Information missing or N/A on 16 persons.

Table 1-5. Demographics - Females, Homestead vs. MacDill/Shaw

Variables	Homestead (N=33)			MacDill/Shaw (N=18)			Homestead and MacDill/Shaw (N=51)			Homestead vs. MacDill/Shaw		
	Number of Subjects	Percent or Mean		Number of Subjects	Percent or Mean		Number of Subjects	Percent or Mean		DF	χ^2 or T-value	Prob
RACE												
White	20 ¹	62.5%		14	77.8%		34	68.0%		2	3.840	0.147
Black	12	37.5%		3	16.7%		15	30.0%				
Hispanic				1	5.6%		1	2.0%				
RACE by WHITE												
White	20 ¹	62.5%		14	77.8%		34	68.0%		1	1.236	0.266
Non-White	12	37.5%		4	22.2%		16	32.0%				
AGE												
	33	36.1		18	36.2		51	36.1		49	-0.0376	0.9702
RANK												
E-6	19 ¹	59.4%		9	50.0%		28	56.0%		2	3.745	0.154
E-7	13	40.6%		7	38.9%		20	40.0%				
E-8	0	0%		2	11.1%		2	4.0%				
EDUCATION												
HS Finished	2 ²	6.5%		2	11.1%		4	8.2%		2	0.354	0.838
Some College	23	74.2%		13	72.2%		36	73.5%				
Bachelors Degree	6	19.4%		3	16.7%		9	18.4%				
EDUCATION by College Degree												
Below College	25 ²	80.6%		15	83.3%		40	81.6%		1	0.055	0.815
College or Up	6	19.4%		3	16.7%		9	18.4%				

Table 2-1-A Psychiatric Symptoms BSI-Males vs. Females, Homestead

Variables	Males (N=276)		Females (N=33)		Males and Females (N=309)		Males vs. Females	
	Number of Subjects	Mean	Number of Subjects	Mean	Number or Subjects	Mean	DF	T-value
BSI								
SOMATIZATION	273 ¹	0.419	33	0.476	306	0.425	304	-0.5242
OBSESSIVE-COMPULSIVE	273 ¹	0.920	33	1.20	306	0.950	304	-1.7466
INTERPERSONAL SENSITIVITY	274 ²	0.657	33	0.838	307	0.677	305	-1.2424
DEPRESSION	273 ¹	0.697	33	1.015	306	0.732	304	-2.0657
ANXIETY	273 ¹	0.545	33	0.722	306	0.564	304	-1.4446
HOSTILITY	273 ¹	0.634	33	0.727	306	0.644	304	-0.6950
GLOBAL SCORES	273 ¹	31.589	33	40.177	306	32.515	304	-1.5102
GLOBAL SEVERITY INDEX	273 ¹	0.596	33	0.758	306	0.613	304	-1.5102
BPSDI POSITIVE SYMPTOM DISTRESS INDEX	251 ³	1.634	31 ²	1.854	282	1.658	280	-2.1946

1. Information missing on 3 persons.
2. Information missing on 2 persons.
3. Information missing on 25 persons.

Table 2-1-B Psychiatric Symptoms BSI-Males vs. Females. Control (MacDill and Shaw)

Variables	Males (N=157)		Females (N=18)		Males and Females (N=175)		Males vs Females	
	Number of Subjects	Mean	Number of Subjects	Mean	Number of Subjects	Mean	DF	T-value Prob
BSI								
SOMATIZATION	156 ¹	0.239	18	0.122	174	0.227	43.6	2.3596 0.0228
OBSESSIVE-COMPULSIVE	156 ¹	0.647	18	0.454	174	0.627	172	1.1570 0.2489
INTERPERSONAL SENSITIVITY	156 ¹	0.444	18	0.361	174	0.435	172	0.5055 0.6139
DEPRESSION	156 ¹	0.434	18	0.296	174	0.420	39.8	1.7254 0.0922
ANXIETY	156 ¹	0.350	18	0.287	174	0.343	172	0.5630 0.5742
HOSTILITY	156 ¹	0.437	18	0.344	174	0.427	172	0.6854 0.4940
GLOBAL SCORES	156 ¹	21.325	18	13.957	174	20.563	32.8	2.2027 0.0348
GLOBAL SEVERITY INDEX	156 ¹	0.402	18	0.263	174	0.388	32.8	2.2027 0.0348
BPSDI POSITIVE SYMPTOM DISTRESS INDEX	139 ²	1.467	15 ³	1.243	154	1.445	30.5	3.242 0.0029

1. Information missing on 1 person.
2. Information missing on 18 persons.
3. Information missing on 3 persons.

Table 2-1-C Psychiatric Symptoms BSI - Males and Females, Homestead vs. MacDill/Shaw

Variables	Homestead (N=309)		MacDill/Shaw (N=175)		Homestead and MacDill/Shaw (N=484)		Homestead vs. MacDill/Shaw		
	Number of Subjects	Mean	Number of Subjects	Mean	Number of Subjects	Mean	DF	T-Value	Prob
BSI									
SOMATIZATION	306 ¹	0.425	174 ²	0.227	480	0.353	473.3	4.5039	0.0001
OBSESSIVE-COMPULSIVE	306 ¹	0.950	174 ²	0.627	480	0.833	436.8	4.5141	0.0001
INTERPERSONAL SENSITIVITY	307 ³	0.677	174 ²	0.435	481	0.589	416	3.5897	0.0004
DEPRESSION	306 ¹	0.732	174 ²	0.420	480	0.619	462.8	4.8242	0.0001
ANXIETY	306 ¹	0.564	174 ²	0.343	480	0.484	465.9	4.3382	0.0001
HOSTILITY	306 ¹	0.644	174 ²	0.427	480	0.566	444.7	3.7383	0.0002
GLOBAL SCORES	306 ¹	32.515	174 ²	20.563	480	28.182	458.2	4.9605	0.0001
GLOBAL SEVERITY INDEX	306 ¹	0.613	174 ²	0.388	480	0.532	458.2	4.9605	0.0001
BPSDI POSITIVE SYMPTOM DISTRESS INDEX	282 ⁴	1.658	154 ⁵	1.445	436	1.583	356.5	4.3968	0.0001

1. Information missing on 3 persons.
2. Information missing on 1 person.
3. Information missing on 2 persons.
4. Information missing on 27 persons.
5. Information missing on 21 persons.

Table 2-1-D Psychiatric Symptoms BSI - Males, Homestead vs. MacDill/Shaw

Variables	Homestead (N=276)		MacDill/Shaw (N=157)		Homestead and MacDill/Shaw (N=433)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Mean	Number of Subjects	Mean	Number of Subjects	Mean	DF	T-Value
BSI								
SOMATIZATION	273 ¹	0.419	156 ²	0.239	429	0.354	420.9	3.7673
OBSESSIVE-COMPULSIVE	273 ¹	0.920	156 ²	0.647	429	0.821	380.5	3.5973
INTERPERSONAL SENSITIVITY	274 ³	0.657	156 ²	0.444	430	0.580	428	2.8948
DEPRESSION	273 ¹	0.697	156 ²	0.434	429	0.602	402.3	3.8366
ANXIETY	273 ¹	0.545	156 ²	0.350	429	0.474	412.4	3.5956
HOSTILITY	273 ¹	0.634	156 ²	0.437	429	0.562	390	3.1954
GLOBAL SCORES	273 ¹	31.589	156	21.325	429	27.857	402	3.9863
GLOBAL SEVERITY INDEX	273 ¹	0.596	156	0.402	429	0.526	402	3.9863
BPSDI POSITIVE SYMPTOM DISTRESS INDEX	251 ⁴	1.634	139	1.467	390	1.574	388	3.1582

1. Information missing on 3 persons.
2. Information missing on 1 person.
3. Information missing on 2 persons.
4. Information missing on 25 persons.
5. Information missing on 18 persons.

Table 2-1-E Psychiatric Symptoms BSI - Females, Homestead vs. MacDill/Shaw

Variables	Homestead (N=33)			MacDill/Shaw (N=18)			Homestead and MacDill/Shaw (N=51)			Homestead vs. MacDill/Shaw		
	Number of Subjects	Mean		Number of Subjects	Mean		Number of Subjects	Mean		DF	T-Value	Prob
BSI												
SOMATIZATION	33	0.476		18	0.122		51	0.351		42.3	3.6225	0.0008
OBSESSIVE-COMPULSIVE	33	1.201		18	0.454		51	0.937		48.7	3.5647	0.0008
INTERPERSONAL SENSITIVITY	33	0.838		18	0.361		51	0.670		48.9	2.3149	0.0249
DEPRESSION	33	1.015		18	0.296		51	0.761		40.1	3.9448	0.0003
ANXIETY	33	0.722		18	0.287		51	0.569		48.6	3.0526	0.0037
HOSTILITY	33	0.727		18	0.344		51	0.592		48.8	2.2790	0.0271
GLOBAL SCORES	33	40.177		18	13.957		51	30.923		44.5	4.0976	0.0002
GLOBAL SEVERITY INDEX	33	0.758		18	0.263		51	0.583		44.5	4.0976	0.0002
BPSDI POSITIVE SYMPTOM DISTRESS INDEX	31 ¹	1.854		15 ²	1.243		46	1.654		41.8	4.9676	0.0001

1. Information missing on 2 persons.

2. Information missing on 3 persons.

Table 2-2-A Psychiatric Symptoms CIOE-Males vs. Females, Homestead

Variables	Males (N=276)		Females (N=33)		Males and Females (N=309)		Males vs. Females	
	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	DF	χ^2 or T-value
CURRENT IMPACT OF EVENT								
Scores	271 ¹	17.810	33	22.675	304	18.338	302	-1.5275 0.1277
Intrusion	271 ¹	9.141	33	11.677	304	9.417	302	-1.5306 0.1269
Avoidance	271 ¹	8.669	33	11.030	304	8.925	302	-1.3310 0.1842
Scores by 19							1	1.763 0.184
Le 19	164 ¹	60.5%	16	48.5	180	59.2		
Gt 19	107	39.5%	17	51.5	124	40.8		
Scores by 3 Levels							2	1.912 0.384
Le 8.5	111 ¹	41.0%	10	30.3%	121	39.8%		
8.6-19	53	19.6%	6	18.2%	59	19.4%		
Gt 19	107	39.5%	7	51.5%	124	40.8%		
ACUTE IMPACT OF EVENT								
Scores	268 ²	30.491	31 ³	37.866	299	31.256	297	-2.3730 0.0183
Intrusion	268 ²	17.239	31 ³	21.677	299	17.700	297	-2.4283 0.0158
Avoidance	268 ²	13.251	31 ³	16.170	299	13.554	297	-1.7604 0.0794
Scores by 19							1	2.986 0.084
Le 19	73 ²	27.2%	4 ³	12.9%	77	25.8%		
Gt 19	195	72.8%	27	87.1%	222	74.2%		

Scores by 3 Levels

Le 8.5

8.6-19

Gt 19

	23 ²	8.6%	0 ²	0%	23	7.7%	2	3.939	0.140
	50	18.7%	4	12.9%	54	18.1%			
	195	72.8%	27	87.1%	222	74.2%			

1. Information missing on 5 persons.
2. Information missing on 8 persons.
3. Information missing on 2 persons.

Table 2-2-B Psychiatric Symptoms CIOE-Males vs. Females, Control (MacDill/Shaw)

Variables	Males (N=157)		Females (N=18)		Males and Females (N=175)		Males vs. Females	
	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	DF	χ^2 or T-value
CURRENT IMPACT OF EVENT								
Scores	151 ¹	3.021	18	2.056	169	2.918	167	0.544 0.5872
Intrusion	151 ¹	1.798	18	1.556	169	1.772	167	0.2417 0.8093
Avoidance	151 ¹	1.225	18	0.500	169	1.148	58.4	1.6468 0.1050
Scores by 19							1	0.473 0.492
Le 19	147 ¹	97.4%	17	94.4%	164	97.0%		
Gt 19	4	2.6%	1	5.6%	5	3.0%		
Scores by 3 Levels							2	2.202 0.333
Le 8.5	133 ¹	88.1%	17	94.4%	150	88.8%		
8.6-19	14	9.3%	0	0%	14	8.3%		
Gt 19	4	2.6%	1	5.6%	5	3.0%		
ACUTE IMPACT OF EVENT								
Scores	155 ²	7.813	18	5.611	173	7.584	19.2	0.7513 0.4616
Intrusion	155 ²	4.535	18	3.389	173	4.416	18.8	0.5996 0.5559
Avoidance	155 ²	3.269	18	2.222	173	3.160	171	0.8830 0.3785
Scores by 19							1	0.000 0.985
Le 19	138 ²	89.0%	16	88.9%	154	89.0%		
Gt 19	17	11.0%	2	11.1%	19	11.0%		

Scores by 3 Levels

	97 ²	62.6%	15	83.3%	112	64.7%	2	3.974	0.137
Le 8.5									
8.6-19	41	26.5%	1	5.6%	42	24.3%			
Gt 19	17	11.0%	2	11.1%	19	11.0%			

1. Information missing on 6 persons.
2. Information missing on 2 persons.

Table 2-2-C Psychiatric Symptoms CIOE - Males and Females, Homestead vs. MacDill/Shaw

Variables	Homestead (N=309)			MacDill/Shaw (N=175)			Homestead and MacDill/Shaw (N=484)			Homestead vs. MacDill/Shaw		
	Number of Subjects	Mean or Percent		Number of Subjects	Mean or Percent		Number of Subjects	Mean or Percent		DF	T-Value or χ^2	Prob
CURRENT IMPACT OF EVENT												
Scores	304 ¹	18.338		169 ²	2.918		422	12.518		441.3	13.6044	0.0001
Intrusion	304 ¹	9.417		169 ²	1.772		473	6.685		453.7	12.7074	0.0001
Avoidance	304 ¹	8.925		169 ²	1.148		473	6.146		425.7	12.5848	0.0001
Scores by 19										1	78.373	0.000
Le 19	180 ¹	59.2%		164 ²	97.0%		344	72.7%				
Gt 19	124	40.8%		5	3.0%		129	27.3%				
Scores by 3 Levels										2	111.141	0.000
Le 8.5	121 ¹	39.8%		150 ²	88.8%		271	57.3%				
8.6-19	59	19.4%		14	8.3%		73	15.4%				
Gt 19	124	40.8%		5	3.0%		129	27.3%				
ACUTE IMPACT OF EVENT												
Scores	299 ³	31.256		173 ⁴	7.584		472	22.579		469.4	20.0024	0.0001
Intrusion	299 ³	17.670		173 ⁴	4.416		472	12.831		470	18.8820	0.0001
Avoidance	299 ³	13.554		173 ⁴	3.160		472	9.744		468.3	16.6804	0.0001
Scores by 19										1	175.531	0.000
Le 19	77 ³	25.8%		154 ⁴	89.0%		231	48.9%				
Gt 19	222	74.2%		19	11.0%		241	51.1%				
Scores by 3 Levels										2	212.687	0.000
Le 8.5	23	7.7%		112 ⁴	64.7%		135	28.6%				
8.6-19	54	18.1%		42	24.3%		96	20.3%				
Gt 19	222	74.2%		19	11.0%		241	51.1%				

1. Information missing on 5 persons.
2. Information missing on 6 persons.
3. Information missing on 10 persons.
4. Information missing on 2 persons.

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Table 2-2-D Psychiatric Symptoms CIOE - Males, Homestead vs. MacDill/Shaw

Variables	Homestead (N = 276)			MacDill/Shaw (N = 157)			Homestead and MacDill/Shaw (N = 433)			Homestead vs. MacDill/Shaw		
	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	DF	X ² or T-value	Prob	
CURRENT IMPACT OF EVENT												
Scores	271 ¹	17.810	151 ²	3.021	422	12.518	398.7	12.3934	0.0001			
Intrusion	271 ¹	9.141	151 ²	1.798	422	6.514	405	11.6451	0.0001			
Avoidance	271 ¹	8.669	151 ²	1.225	422	6.005	389	11.4210	0.0001			
Scores by 19							1	67.871	0.000			
Le 19	164 ¹	60.5%	147 ²	97.4%	311	73.7%						
Gt 19	107	39.5%	4	2.6%	111	26.3%						
Scores by 3 Levels							2	93.716	0.000			
Le 8.5	111 ¹	41.0%	133 ²	88.1%	244	57.8%						
8.6-19	53	19.6%	14	9.3%	67	15.9%						
Gt 19	107	39.5%	4	2.6%	111	26.3%						
ACUTE IMPACT OF EVENT												
Scores	268 ³	30.491	155 ⁴	7.813	423	22.181	419.2	18.5007	0.0001			
Intrusion	268 ³	17.239	155 ⁴	4.535	423	12.584	419.3	17.4204	0.0001			
Avoidance	268 ³	13.251	155 ⁴	3.269	423	9.593	419.9	15.3671	0.0001			
Scores by 19							1	149.994	0.000			
Le 19	73 ³	27.2%	138 ⁴	89.0%	211	49.9%						
Gt 19	195	72.8%	17	17.0%	212	50.1%						
Scores by 3 Levels							2	178.530	0.000			
Le 8.5	23 ³	8.6%	97 ⁴	62.6%	120	28.4%						
8.6-19	50	18.7%	41	26.5%	91	21.5%						
Gt 19	195	72.8%	17	11.0%	212	50.1%						

1. Information missing on 5 persons.
2. Information missing on 6 persons.
3. Information missing on 8 persons.
4. Information missing on 2 persons.

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Table 2-2-E Psychiatric Symptoms CIOE - Females, Homestead vs. MacDill/Shaw

Variables	Homestead (N=33)			MacDill/Shaw (N=18)			Homestead and MacDill/Shaw (N=51)			Homestead vs. MacDill/Shaw		
	Number of Subjects	Mean or Percent		Number of Subjects	Mean or Percent		Number of Subjects	Mean or Percent		DF	χ^2 or T-value	Prob
CURRENT IMPACT OF EVENT												
Scores	33	22.675		18	2.056		51	15.398		40.8	5.7884	0.0001
Intrusion	33	11.677		18	1.556		51	8.105		47.7	5.1502	0.0001
Avoidance	33	11.030		18	0.500		51	7.314		33.8	5.4920	0.0001
Scores by 19										1	10.773	0.001
Le 19	16	48.5%		17	94.4%		33	64.7%				
Gt 19	17	51.5%		1	5.6%		18	35.3%				
Scores by 3 Levels										2	19.294	0.000
Le 8.5	10	30.3%		17	94.4%		27	52.9%				
8.6-19	6	18.2%		0	0%		6	11.8%				
Gt 19	17	51.5%		1	5.6%		18	35.3%				
ACUTE IMPACT OF EVENT												
Scores	31'	37.866		18	5.611		49	26.017		47	7.2362	0.0000
Intrusion	31'	21.677		18	3.389		49	14.959		47	7.3397	0.0000
Avoidance	31'	16.170		18	2.222		49	11.047		46.7	6.6082	0.0001
Scores by 19										1	27.219	0.000
Le 19	4'	12.9%		16	88.9%		20	40.8%				
Gt 19	27	87.1%		2	11.1%		29	59.2%				

Scores by 3 Levels					
Le 8.5	0'	15	83.3%	15	37.545
8.6-19	2	1	5.6%	5	10.2%
Gt 19	3	2	11.1%	29	59.2%
					0.000

1. Information missing on 2 persons.

Table 3-1-A Health Care Utilization-Males vs. Females, Homestead

Variables	Males (N=276)		Females (N=33)		Males and Females (N=309)		Males vs. Females	
	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	DF	T-value or χ^2
MEDICARE OBTAINING								
Annual Physical							1	0.718
Yes	59 ¹	22.3%	9 ²	29.0%	68	23.0%		0.397
No	206	77.7%	22	71.0%	228	77.0%		
FOR PHYSICAL PROBLEM								
Yes	96 ³	35.4%	22	66.7%	118	38.8%	1	12.091
No	175	64.6%	11	33.3%	186	61.2%		0.001
FOR EMOTION PROBLEM								
Yes	33 ⁴	12.5%	7 ⁵	21.9%	40	13.5%	1	2.146
No	231	87.5%	32	78.1%	256	86.5%		0.143
NOT ABLE TO GET MED								
Yes	26 ⁶	10.7%	5 ⁷	16.7%	31	11.4%	1	0.945
No	217	89.3%	25	83.3%	242	88.6%		0.331
FATIGUE ON MONDAY EVENING								
1	34 ⁸	12.6%	1 ⁹	3.1%	35	11.6%	6	12.000
2	20	7.4%	2	6.3%	22	7.3%		0.062
3	20	7.4%	0	0%	20	6.6%		
4	25	9.3%	2	6.3%	27	8.9%		
5	37	13.7%	3	9.4%	40	13.2%		
6	43	15.9%	4	12.5%	47	15.6%		
7	91	33.7%	20	62.5%	111	36.8%		

6 9.063 0.170

5.2% 7.5% 5.9% 5.7% 9.6% 0.2% 5.9%

3.232
4.488
5.221
5.693
5.763
6.708

Table 3-1-B Health Care Utilization - Males vs. Females, Control (MacDill/Shaw)

Variables	Males (N = 157)		Females (N = 18)		Males and Females (N = 175)		Males vs. Females	
	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	Number of Subjects	Percent or Mean	DF	χ^2 or T-value
MEDICARE OBTAINING								
Annual Physical								
Yes	31 ¹	20.7%	3 ²	18.8%	34	20.5%	1	0.033
No	119	79.3%	13	81.3%	132	79.5%		0.857
FOR PHYSICAL PROBLEM								
Yes	72 ²	46.5%	11	61.1%	83	48.0%	1	1.389
No	83	53.5%	7	38.9%	90	52.0%		0.239
FOR EMOTION PROBLEM								
Yes	7 ³	4.6%	0 ²	0%	7	4.2%	1	0.769
No	145	95.4%	16	100%	161	95.8%		0.381
NOT ABLE TO GET MED								
Yes	16 ⁴	10.9%	1 ²	6.3%	17	10.4%	1	0.332
No	131	89.1%	15	93.8%	146	89.6%		0.565
FATIGUE ON MONDAY EVENING								
1	74 ¹	49.3%	12	66.7%	86	51.2%	6	12.267
2	20	13.3%	0	0%	20	11.9%		0.056
3	18	12.0%	1	5.6%	19	11.3%		
4	14	9.3%	2	11.1%	16	9.5%		
5	12	8.0%	0	0%	12	7.1%		
6	7	4.7%	0	0%	7	4.2%		
7	5	3.3%	3	16.7%	8	4.8%		
RETURNING TO NORMAL PACE								
1-2 Days	27	17.2%	2	11.1%	29	16.6%	6	2.509
3-4 Days	16	10.2%	1	5.6%	17	9.7%		0.867
5-6 Days	6	3.8%	1	5.6%	7	4.0%		
1-2 Weeks	10	6.4%	2	11.1%	12	6.9%		
3-4 Weeks	5	3.2%	0	0%	5	2.9%		
More than 4 Weeks	4	2.5%	1	5.6%	5	2.9%		
N/A, Never Altered Normal Pace	89	56.7%	11	61.1%	100	57.1%		

HOURS OF SLEEP

Sunday Night	145 ³	6.152	17 ⁶	6.588	162	6.198	160	-0.8846	0.3777
Monday Night	148 ⁷	6.716	17 ⁶	7.118	165	6.758	163	-1.0136	0.3123
Tuesday Night	148 ⁷	6.878	17 ⁶	7.176	165	6.909	163	-0.8383	0.4031
Wednesday Night	148 ⁷	6.946	17 ⁶	7.353	165	6.988	163	-1.2695	0.2061
Thursday Night	147 ⁴	6.939	17 ⁶	7.294	164	6.976	162	-1.0228	0.3079
Last Night	146 ⁸	7.103	17 ⁶	7.412	163	7.135	161	-0.9609	0.3381

1. Information missing on 7 persons.
2. Information missing on 2 persons.
3. Information missing on 5 persons.
4. Information missing on 10 persons.
5. Information missing on 12 persons.
6. Information missing on 1 person.
7. Information missing on 9 persons.
8. Information missing on 11 persons.

Table 3-1-C Health Care Utilization - Males and Females, Homestead vs. MacDill/Shaw

Variables	Homestead (N=309)			MacDill/Shaw (N=175)			Homestead and MacDill/Shaw (N=484)			Homestead vs. MacDill/Shaw		
	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	DF	χ ² or T-value	Prob	
MEDICARE OBTAINING												
Annual Physical												
Yes	68 ¹	23.0%	34 ²	20.5%	102	22.1%	1	0.384	0.536			
No	228	77.0%	132	79.5%	360	77.9%						
FOR PHYSICAL PROBLEM												
Yes	118 ³	38.8%	83 ⁴	48.0%	201	42.1%	1	3.795	0.051			
No	186	61.2%	90	52.0%	276	57.9%						
FOR EMOTION PROBLEM												
Yes	40 ¹	13.5%	7 ⁵	4.2%	47%	10.1%	1	4.098	0.043			
No	256	86.5%	161	95.8%	417%	89.9%						
NOT ABLE TO GET MED												
Yes	31 ⁶	11.4%	17 ⁷	10.4%	48	11.0%	1	0.089	0.765			
No	242	88.6%	146	89.6%	388	89.0%						
FATIGUE ON MONDAY EVENING												
1	35 ⁵	11.6%	86 ⁵	51.2%	121	25.7%	6	130.709	0.000			
2	22	7.3%	20	11.9%	42	8.9%						
3	20	6.6%	19	11.3%	39	8.3%						
4	27	8.9%	16	9.5%	43	9.1%						
5	40	13.2%	12	7.1%	52	11.1%						
6	47	15.6%	7	4.2%	54	11.5%						
7	111	36.8%	8	4.8%	119	25.3%						

RETURNING TO NORMAL PACE

1-2 Days	16 ⁸	5.2%	29	16.6%	45	9.4%	6	224.362	0.000
3-4 Days	23	7.5%	17	9.7%	40	8.3%			
5-6 Days	18	5.9%	7	4.0%	25	5.2%			
1-2 Weeks	48	15.7%	12	6.9%	60	12.5%			
3-4 Weeks	60	19.6%	5	2.9%	65	13.5%			
More than 4 Weeks	123	40.2%	5	2.9%	128	26.6%			
N/A, Never Altered Normal Pace	18	5.9%	100	57.1%	118	24.5%			

HOURS OF SLEEP

Sunday Night	293 ⁹	3.232	162 ¹	6.198	455	4.288	401.1	-14.2517	0.0001
Monday Night	293 ⁹	4.488	165 ¹⁰	6.758	409	5.396	439.1	-12.6968	0.0001
Tuesday Night	294 ¹¹	5.221	165 ¹⁰	6.909	459	5.828	430.6	-10.8023	0.0001
Wednesday Night	296 ¹	5.693	165 ¹⁰	6.988	461	6.156	450.1	-8.6469	0.0001
Thursday Night	295 ¹²	5.763	164 ¹³	6.976	459	6.196	442.8	-7.6183	0.0001
Last Night	288 ¹⁴	6.708	163 ⁷	7.135	451	6.863	438.6	-2.8627	0.0044

1. Information missing on 13 persons.
2. Information missing on 9 persons.
3. Information missing on 5 persons.
4. Information missing on 2 persons.
5. Information missing on 7 persons.
6. Information missing on 36 persons.
7. Information missing on 12 persons.
8. Information missing on 3 persons.
9. Information missing on 16 persons.
10. Information missing on 10 persons.
11. Information missing on 15 persons.

12. Information missing on 14 persons.
13. Information missing on 11 persons.
14. Information missing on 21 persons.

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Table 3-1-D Health Care Utilization - Males, Homestead vs. MacDill/Shaw

Variables	Homestead (N=276)			MacDill/Shaw (N=157)			Homestead and MacDill/Shaw (N=433)			Homestead vs. MacDill/Shaw		
	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	DF	χ ² or T-value	Prob	
MEDICARE OBTAINING												
Annual Physical												
Yes	59 ¹	22.3%	31 ²	20.7%	90	21.7%	1	0.144	0.704			
No	206	77.7%	119	79.3%	325	78.3%						
FOR PHYSICAL PROBLEM												
Yes	96 ³	35.4%	72 ⁴	46.5%	168	39.4%	1	5.020	0.025			
No	175	64.6%	83	53.5%	258	60.6%						
FOR EMOTION PROBLEM												
Yes	33 ⁵	12.5%	7 ³	4.6%	40	9.6%	1	6.918	0.009			
No	231	87.5%	145	95.4%	376	90.4%						
NOT ABLE TO GET MED												
Yes	26 ⁶	10.7%	16 ⁷	10.9%	42	10.8%	1	0.003	0.955			
No	217	89.3%	131	89.1%	348	89.2%						
FATIGUE ON MONDAY EVENING												
1	34 ⁸	12.6%	74 ²	49.3%	108	25.7%	6	108.294	0.000			
2	20	7.4%	20	13.3%	40	9.5%						
3	20	7.4%	18	12.0%	38	9.0%						
4	25	9.3%	14	9.3%	39	9.3%						
5	37	13.7%	12	8.0%	49	11.7%						
6	43	15.9%	7	4.7%	50	11.9%						
7	91	33.7%	5	3.3%	96	22.9%						

RETURNING TO NORMAL PACE									
	15 ⁹	5.5%	27	17.2%	42	9.8%	6	193.110	0.000
1-2 Days	23	8.4%	16	10.2%	39	9.1%			
3-4 Days	15	5.5%	6	3.8%	21	4.9%			
5-6 Days	44	16.1%	10	6.4%	54	12.6%			
1-2 Weeks	54	19.8%	5	3.2%	59	13.7%			
3-4 Weeks	104	38.1%	4	2.5%	108	25.1%			
More than 4 Weeks	18	6.6%	89	56.7%	107	24.9%			
N/A, Never Altered Normal Pace									
HOURS OF SLEEP									
Sunday Night	261 ¹⁰	3.345	145 ⁵	6.152	406	4.347	355.3	-12.5582	0.0001
Monday Night	261 ¹⁰	4.648	148 ¹¹	6.716	409	5.396	388.2	-11.1124	0.0001
Tuesday Night	262 ¹²	5.260	148 ¹¹	6.878	410 ¹³	5.844	389.4	-9.8070	0.0001
Wednesday Night	264 ⁵	5.75	148 ¹¹	6.946	412	6.180	401.3	-7.4650	0.0001
Thursday Night	263 ¹⁴	5.817	147 ⁷	6.939	410	6.220	391.3	-6.6777	0.0001
Last Night	257 ¹⁵	6.743	146 ¹	7.103	403	6.873	391.6	-2.2508	0.0249

1. Information missing on 11 persons.
2. Information missing on 7 persons.
3. Information missing on 5 persons.
4. Information missing on 2 persons.
5. Information missing on 12 persons.
6. Information missing on 33 persons.
7. Information missing on 10 persons.
8. Information missing on 6 persons.
9. Information missing on 3 persons.
10. Information missing on 15 persons.
11. Information missing on 9 persons.
12. Information missing on 14 persons.
13. Information missing on 23 persons.
14. Information missing on 13 persons.
15. Information missing on 19 persons.

Table 3-1-E Health Care Utilization - Females, Homestead vs. MacDill/Shaw

Variables	Homestead (N=33)		MacDill/Shaw (N=18)		Homestead and MacDill/Shaw (N=51)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	DF	χ^2 or T-value
MEDICARE OBTAINING								
Annual Physical								
Yes	9 ¹	29.0%	3 ¹	18.8%	12	25.5%	1	0.587
No	22	71.0%	13	81.3%	35	74.5%		0.444
FOR PHYSICAL PROBLEM								
Yes	22	66.7%	11	61.1%	33	64.7%	1	0.157
No	11	33.3%	7	38.9%	18	35.3%		0.692
FOR EMOTION PROBLEM								
Yes	7 ²	21.9%	0 ¹	0%	7	14.6%	1	4.098
No	25	78.1%	16	100%	41	85.4%		0.043
NOT ABLE TO GET MED								
Yes	5 ³	16.7%	1 ¹	6.3%	6	13.0%	1	0.998
No	25	83.3%	15	93.8%	40	87.0%		0.318
FATIGUE ON MONDAY EVENING								
1	1 ²	3.1%	12	66.7%	13	26.0%	6	30.331
2	2	6.3%	0	0%	2	4.0%		0.000
3	0	0%	1	5.6%	1	2.0%		
4	2	6.3%	2	11.1%	4	8.0%		
5	3	9.4%	0	0%	3	6.0%		
6	4	12.5%	0	0%	4	8.0%		
7	20	62.5%	3	16.7%	23	46.0%		

RETURNING TO NORMAL PACE							6	34,798	0.000
1-2 Days	1	3.0%	2	11.1%	3	5.9%			
3-4 Days	0	0%	1	5.6%	1	2.0%			
5-6 Days	3	9.1%	1	5.6%	4	7.8%			
1-2 Weeks	4	12.1%	2	11.1%	6	11.8%			
3-4 Weeks	6	18.2%	0	0%	6	11.8%			
More than 4 Weeks	19	57.6%	1	5.6%	20	39.2%			
N/A, Never Altered Normal Pace	0	0%	11	61.1%	11	21.6%			

HOURS OF SLEEP									
Sunday Night	32 ²	2.313	17 ²	6.588	49	3.796	47	-7.3833	0.0000
Monday Night	32 ²	3.188	17 ²	7.118	49	4.551	47	-6.0994	0.0000
Tuesday Night	32 ²	4.906	17 ²	7.176	49	5.694	47	-4.4275	0.0001
Wednesday Night	32 ²	5.219	17 ²	7.353	49	5.959	46.9	-5.3242	0.0001
Thursday Night	32 ²	5.313	17 ²	7.294	49	6	47	-4.0171	0.0002
Last Night	31 ¹	6.419	17 ²	7.412	48	6.771	45.1	-2.4753	0.0171

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Table 4-1-A Coping - Males vs. Females, Homestead

Variables	Males (N=276)		Females (N=33)		Males and Females (N=309)		Males vs. Females	
	Number of Subjects	Percent	Number of Subjects	Percent	Number of Subjects	Percent	DF	χ^2 Prob
Talk about Andrew with Spouse or Significant Other								
Yes	141 ¹	57.1%	17 ²	68.0%	158	58.1%	1	1.111 0.292
No	106	42.9%	8	32.0%	114	41.9%		
Co-Workers								
Yes	152 ³	56.5%	20	60.6%	172	57.0%	1	0.202 0.653
No	117	43.5%	13	39.4%	130	43.0%		
Children								
Yes	63 ⁴	28.8%	8 ⁵	30.8%	71	29.0%	1	0.045 0.832
No	156	71.2%	18	69.2%	174	71.0%		
Others								
Yes	40 ⁶	41.2%	6 ⁷	42.9%	46	41.4%	1	0.013 0.908
No	57	58.8%	8	57.1%	65	58.6%		

1. Information missing on 29 persons.
2. Information missing on 8 persons.
3. Information missing on 7 persons.
4. Information missing on 57 persons.
5. Information missing on 7 persons.
6. Information missing on 179 persons.
7. Information missing on 19 persons.

Table 4-1-B. Coping - Males vs. Females, Control (MacDill/Shaw)

Variables	Males (N = 157)		Females (N = 18)		Males and Females (N = 175)		Males vs. Females	
	Number of Subjects	Percent	Number of Subjects	Percent	Number of Subjects	Percent	DF	χ^2 Prob
Talk about Andrew with								
Spouse or Significant Other								
Yes	18 ¹	12.9%	2 ²	18.2%	20	13.3%	1	0.241 0.623
No	121	87.1%	9	81.8%	130	86.7%		
Co-Workers								
Yes	28 ³	18.5%	4	22.2%	32	18.9%	1	0.142 0.706
No	123	81.5%	14	77.8%	137	81.1%		
Children								
Yes	5 ⁴	3.7%	0 ⁵	0	5	3.4%	1	0.419 0.518
No	131	96.3%	11	100%	142	96.6%		
Others								
Yes	4 ⁶	5.2%	1 ⁷	10.0%	5	5.7%	1	0.377 0.539
No	73	94.8%	9	90.0%	82	94.3%		

1. Information missing on 18 persons.
2. Information missing on 7 persons.
3. Information missing on 6 persons.
4. Information missing on 21 persons.
5. Information missing on 7 persons.
6. Information missing on 80 persons.
7. Information missing on 8 persons.

Table 4-1-C Coping - Males and Females, Homestead vs. MacDill/Shaw

Variables	Homestead (N=309)		MacDill/Shaw (N=175)		Homestead and MacDill/Shaw (N=484)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Percent	Number of Subjects	Percent	Number of Subjects	Percent	DF	χ^2 Prob
Talk about Andrew with Spouse or Significant Other								
Yes	158 ¹	58.1%	20 ²	13.3%	178	42.2%	1	79.404 0.000
No	114	41.9%	130	86.7%	244	57.8%		
Co-Workers								
Yes	172 ³	57.0%	32 ³	18.9%	204	43.3%	1	63.792 0.000
No	130	43.0%	137	81.1%	267	56.7%		
Children								
Yes	71 ⁵	29.0%	5 ⁶	3.4%	76	19.4%	1	38.460 0.000
No	174	71.0%	142	96.6%	316	80.6%		
Others								
Yes	46 ⁷	41.4%	5 ⁴	5.7%	51	25.8%	1	32.495 0.000
No	65	58.6%	82	94.3%	147	74.2%		

1. Information missing on 37 persons.
2. Information missing on 25 persons.
3. Information missing on 7 persons.
4. Information missing on 6 persons.
5. Information missing on 64 persons.
6. Information missing on 28 persons.
7. Information missing on 198 persons.
8. Information missing on 88 persons.

Table 4-1-D Coping - Males, Homestead vs. MacDill/Shaw

Variables	Homestead (N=276)		MacDill/Shaw (N=157)		Homestead and MacDill/Shaw (N=433)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Percent	Number of Subjects	Percent	Number of Subjects	Percent	DF	χ^2 Prob
Talk about Andrew with								
Spouse or Significant Other								
Yes	141 ¹	57.1%	18 ²	12.9%	159	41.2%	1	71.524 0.000
No	106	42.9%	121	87.1%	227	58.8%		
Co-Workers								
Yes	152 ³	56.5%	28 ⁴	18.5%	180	42.9%	1	56.912 0.000
No	117	43.5%	123	81.5%	240	57.1%		
Children								
Yes	63 ⁵	28.8%	5 ⁶	3.7%	68	19.2%	1	34.107 0.000
No	156	71.2%	131	96.3%	287	80.8%		
Others								
Yes	40 ⁷	41.2%	4 ⁸	5.2%	44	25.3%	1	29.515 0.000
No	57	58.8%	73	94.8%	130	74.7%		

1. Information missing on 29 persons.
2. Information missing on 18 persons.
3. Information missing on 7 persons.
4. Information missing on 6 persons.
5. Information missing on 57 persons.
6. Information missing on 21 persons.
7. Information missing on 179 persons.
8. Information missing on 80 persons.

Table 4-1-E Coping - Females, Homestead vs. MacDill/Shaw

Variables	Homestead (N=33)		MacDill/Shaw (N=18)		Homestead and MacDill/Shaw (N=51)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Percent	Number of Subjects	Percent	Number of Subjects	Percent	DF	χ^2 Prob
Talk about Andrew with								
Spouse or Significant Other								
Yes	17 ¹	68.0%	2 ²	18.2%	19	52.8%	1	7.607 0.006
No	8	32.0%	9	81.8%	17	47.2%		
Co-Workers								
Yes	20	60.6%	4	22.2%	24	47.1%	1	6.888 0.009
No	13	39.4%	14	77.8%	27	52.9%		
Children								
Yes	8 ²	30.8%	0 ²	0%	8	21.6%	1	4.318 0.038
No	18	69.2%	11	100%	29	78.4%		
Other								
Yes	6 ³	42.9%	1 ¹	10.0%	7	29.2%	1	3.048 0.081
No	8	57.1%	9	90.0%	17	70.8%		

1. Information missing on 8 persons.

2. Information missing on 7 persons.

3. Information missing on 19 persons.

Table 4-2-A Property - Males vs. Females, Homestead

Variables	Males (N=276)			Females (N=33)			Males and Females (N=309)			Males vs. Females		
	Number of Subjects	Percent or Mean		Number of Subjects	Percent or Mean		Number of Subjects	Percent or Mean		DF	T-value	Prob or χ^2
Personally Affected by Looting												
Yes	118 ¹	43.7%		11 ²	35.5%		129	42.9%		1	0.767	0.381
No	152	56.3%		20	64.5%		172	57.1%				
Extent of Damage to Your Neighborhood												
1	2 ²	0.7%		0 ³	0%		2	0.7%		5	3.264	0.659
2	1	0.4%		0	0%		1	0.3%				
4	3	1.1%		0	0%		3	1.0%				
5	25	9.1%		5	16.7%		30	9.9%				
6	142	51.8%		12	40.0%		154	50.7%				
7	101	36.9%		13	43.3%		114	37.5%				
Percent of Salvaged Belongings												
	270 ¹	33.11481		31 ²	33.87097		301	33.19269		299	-0.1462	0.8839
Estimated Total Lost												
	262 ⁴	49287.77		30	61356.67		292	50527.73		32.4	-0.9242	0.3622
Claim with Air Force												
Yes	162 ⁵	60.4%		16 ⁶	50.0%		178	59.3%		1	1.293	0.255
No	106	39.6%		16	50.0%		122	40.7%				
Amount of Claim												
	153 ⁷	24213.55		14 ⁸	21659.29		167	23999.42		165	0.4552	0.6495
Claim Settled												
Yes	131 ⁹	81.9%		13 ¹⁰	81.3%		144	81.8%		1	0.004	0.951
No	29	18.1%		3	18.8%		32	18.2%				
Insurance Covered												
Yes	121 ¹¹	44.6%		18 ⁶	56.3%		139	45.9%		2	2.115	0.347
No	143	52.8%		14	43.8%		157	51.8%				
N/A	7	2.6%		0	0%		7	2.3%				
Amount Insured												
	119 ¹²	64731.42		17 ¹³	75629.41		136	66093.67		134	-0.7052	0.4819

Insurance Claim Settled

Yes	110 ¹⁴	91.7%	18 ⁴	94.7%	128	1	0.212	0.645
No	10	8.3%	1	5.3%	11			

1. Information missing on 6 persons.
2. Information missing on 2 persons.
3. Information missing on 3 persons.
4. Information missing on 14 persons.
5. Information missing on 8 persons.
6. Information missing on 1 person.
7. Information missing on 123 persons.
8. Information missing on 19 persons.
9. Information missing on 116 persons.
10. Information missing on 17 persons.
11. Information missing on 5 persons.
12. Information missing on 157 persons.
13. Information missing on 16 persons.
14. Information missing on 156 persons.

Table 4-3-A Other Physical Related Variables - Males vs. Females, Homestead

Variables	Males (N=276)			Females (N=33)			Males and Females (N=309)			Males vs. Females		
	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	Number of Subjects	Mean or Percent	DF	T-value or χ^2	Prob	
In Physical Danger	80 ¹	29.4%	6 ²	18.8%	86	28.3%	1	1.604	0.205			
	192	70.6%	26	81.3%	218	71.7%						
Self Injured	13 ³	5.3%	2 ⁴	7.4%	15	5.5%	1	0.206	0.650			
	232	94.7%	25	92.6%	257	94.5%						
SSO Injured	5 ⁵	2.3%	0 ⁶	0%	5	2.1%	1	0.487	0.485			
	215	97.7%	21	100%	236	97.9%						
Children Injured	10 ⁷	5.0%	0 ⁶	0%	10	4.5%	1	1.100	0.294			
	190	95.0%	21	100%	211	95.5%						
Other Persons Injured	3 ⁸	2.2%	0 ⁹	0%	3	1.9%	1	0.380	0.538			
	134	97.8%	17	100%	151	98.1%						
I was Concerned for My Safety	87 ¹⁰	33.2%	7 ²	21.9%	94	32.0%	6	10.061	0.122			
	33	12.6%	4	12.5%	37	12.6%						
	26	9.9%	6	18.8%	32	10.9%						
	34	13.0%	3	9.4%	37	12.6%						
	28	10.7%	1	3.1%	29	9.9%						
	21	8.0%	2	6.3%	23	7.8%						
	33	12.6%	9	28.1%	42	14.3%						

1. Information missing on 4 persons.

2. Information missing on 1 person.
3. Information missing on 31 persons.
4. Information missing on 6 persons.
5. Information missing on 56 persons.
6. Information missing on 12 persons.
7. Information missing on 76 persons.
8. Information missing on 139 persons.
9. Information missing on 16 persons.
10. Information missing on 14 persons.

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Table 4-3-B Other Physical Related Variables - Males vs. Females Control (MacDill/Shaw)

Variables	Males (N=157)		Females (N=18)		Males and Females (N=175)		Males vs. Females	
	Number of Subjects	Percent	Number of Subjects	Percent	Number of Subjects	Percent	DF	χ^2 Prob
I Was Concerned for My Safety							6	4.055 0.669
1	68 ¹	68.7%	12 ²	92.3%	80	71.4%		
2	12	12.1%	0	0%	12	10.7%		
3	7	7.1%	1	7.7%	8	7.1%		
4	6	6.1%	0	0%	6	5.4%		
5	1	1.0%	0	0%	1	0.9%		
6	2	2.0%	0	0%	2	1.8%		
7	3	3.0%	0	0%	3	2.7%		

1. Information missing on 58 persons.
2. Information missing on 5 persons.

Table 4-3-C Other Physical Related Variables - Males and Females, Homestead vs. MacDill/Shaw

Variable	Homestead (N=309)		MacDill/Shaw (N=175)		Homestead and MacDill/Shaw (N=484)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Percent	Number of Subjects	Percent	Number of Subjects	Percent	DF	χ^2 Prob
I Was Concerned for My Safety							6	58.341 0.000
1	94 ¹	32.0%	80 ²	71.4%	174	42.9%		
2	37	12.6%	12	10.7%	49	12.1%		
3	32	10.9%	8	7.1%	40	9.9%		
4	37	12.6%	6	5.4%	43	10.6%		
5	29	9.9%	1	0.9%	30	7.4%		
6	23	7.8%	2	1.8%	25	6.2%		
7	42	14.3%	3	2.7%	45	11.1%		

1. Information missing on 15 persons.

2. Information missing on 63 persons.

Table 4-3-D Other Physical Related Variables - Males, Homestead vs. MacDill/Shaw

Variable	Homestead (N=276)		MacDill/Shaw (N=157)		Homestead and MacDill/Shaw (N=433)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Percent	Number of Subjects	Percent	Number of Subjects	Percent	DF	χ^2 Prob
I Was Concerned for My Safety								
1	87 ¹	33.2%	68 ²	68.7%	155	42.9%	6	43.842 0.000
2	33	12.6%	12	12.1%	45	12.5%		
3	26	9.9%	7	7.1%	33	9.1%		
4	34	13.0%	6	6.1%	40	11.1%		
5	28	10.7%	1	1.0%	29	8.0%		
6	21	8.0%	2	2.0%	23	6.4%		
7	33	12.6%	3	3.0%	36	10.0%		

1. Information missing on 14 persons.

2. Information missing on 58 persons.

Table 4-3-E Other Physical Related Variables - Females, Homestead vs. MacDill/Shaw

Variable	Homestead (N=33)		MacDill/Shaw (N=18)		Homestead and MacDill/Shaw (N=51)		Homestead vs. MacDill/Shaw	
	Number of Subjects	Percent	Number of Subjects	Percent	Number of Subjects	Percent	DF	χ ² Prob
I Was Concerned fo My Safety							6	19.307 0.004
1	7 ¹	21.9%	12 ²	92.3%	19	42.2%		
2	4	12.5%	0	0%	4	8.9%		
3	6	18.8%	1	7.7%	7	15.6%		
4	3	9.4%	0	0%	3	6.7%		
5	1	3.1%	0	0%	1	2.2%		
6	2	6.3%	0	0%	2	4.4%		
7	9	28.1%	0	0%	9	20.0%		

1. Information missing on 1 person.

2. Information missing on 5 persons.

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Table 5-A. MANOVA for IOE and SCL, Males vs. Females, Homestead

Variables	Number of Subjects	Wilks'λ	F	Num DF	Den DF	Pr > F
AioeInt, AioeAvd Gender Effect	299	0.97999297	3.0215	2	296	0.0502
CioeInt, CioeAvd Gender Effect	304	0.99196076	1.2197	2	301	0.2968
Som, Anx, Dep, Hos Gender Effect	306	0.98146013	1.4215	4	301	0.2267

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Data source: d06:\wang.psychiat.andrew.women5a\manova.lis

Table 5-C. MANOVA for IOE and SCL, Males and Females, Homestead vs. MacDill/Shaw

Variables	Number of Subjects	Wilks' λ	F	Num DF	Den DF	Pr > F
AioeInt, AioeAvd Site Effect	472	0.60658854	152.0882	2	469	0.0001
CioeInt, CioeAvd Site Effect	473	0.79307575	61.3147	2	470	0.0001
Som, Anx, Dep, Hos Site Effect	480	0.95443949	5.6686	4	475	0.0002

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Table 5-D. MANOVA for IOE and SCL, Males, Homestead vs. MacDill/Shaw

Variables	Number of Subjects	Wilks' λ	F	Num DF	Den DF	Pr > F
AioeInt, AioeAvd Site Effect	433	0.62120925	128.0503	2	420	0.0001
CioeInt, CioeAvd Site Effect	422	0.80255604	51.5410	2	419	0.0001
Som, Anx, Dep, Hos Site Effect	429	0.96495692	3.8495	4	424	0.0044

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Table 5-E. MANOVA for IOE and SCL, Females, Homestead vs. MacDill/Shaw

Variables	Number of Subjects	Wilks' λ	F	Num DF	Den DF	Pr > F
AioeInt, AioeAvd Site Effect	49	0.45696135	27.3325	2	46	0.0001
CioeInt, CioeAvd Site Effect	51	0.70876405	9.8618	2	48	0.0003
Som, Anx, Dep, Hos Site Effect	51	0.79375603	2.9881	4	46	0.0283

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Chapter 3

Measuring Gender Effects on the Stress Response of Health Care Workers to an Air Disaster: The Importance of Sample Size & Multimodal Assessment

Richard S. Epstein, Carol S. Fullerton, & Robert J. Ursano

INTRODUCTION

There have been conflicting reports regarding the effects of gender on the incidence of Posttraumatic Stress Disorder (PTSD) following exposure to trauma. Several studies on large samples from both military and civilian populations suggest that women are more likely to develop PTSD (Wolfe, Brown, and Kelly 1993; Breslau, Davis, Andreski, et al 1991; Shore, Vollmer, and Tatum 1989). Although other reports showed no gender differences in PTSD prevalence following trauma, in most instances they were based on lower sample sizes that carried a higher beta, i.e., a probability of type II (false negative) error (Hovens and Falger 1994; Kulka et al 1988; Madakasira and O'Brien KF 1987). Table 1 compares the results of these studies showing rates of PTSD by gender, reported sample sizes, calculation of the probability beta of a false negative error, and the required sample size in a balanced design (the number of male respondents being equal to the number of females) to achieve a probability $\beta = 0.2$.

The National Vietnam Veterans Readjustment Study (NVVRS - Kulka et al 1988) had sufficient sample size with very low beta, and revealed a higher rate of PTSD among male veterans with high war zone exposure than female veterans with similar exposure. It can be argued that comparing PTSD rates in men versus women using data from the NVVRS is inappropriate because highly exposed men

consisted primarily of combat troops, while most women who had high war zone exposure served as military nurses. On the other hand, many female nurses serving in Vietnam were exposed to direct combat conditions such as mortar attacks. They were also more likely to have been older at the time of service, to have held higher rank, and to have received more education than the male combat troops they attended. Thus it is possible to consider the NVVRS as an example of how other variables known to affect risk for PTSD may be accidentally correlated with gender in a particular study population. It provides a good illustration of one of the problems confounding the study of gender effects on stress.

PTSD outcome studies based on smaller samples also show divergence of outcome by gender (Perconte et al 1993 women's PTSD scores were higher; Feinstein and Dolan 1991 - no gender differences were found; Roca et al 1992 - no gender differences were found; Ross and Wonders 1993 - no gender differences were found). Research endeavoring to assess psychological measures of stress response aside from PTSD, has shown similar discrepancies regarding the role of gender (Kessler and McLeod 1984; Rosario et al 1988; Klingman and Kupermintz 1994; Bar-Tal, Lurie, and Glick 1994; Lurie, Bar-Tal, and Glick 1995; Rahav and Ronen 1994; Schwarzwald et al 1994; Al-Issa and Ismail 1994; Hall and Jansen 1995; Vrana and Lauterbach 1994), as do studies of

physiological response to stress (Shore, Volmer and Tatum 1989; Shalev et al 1993; Grossman and Wood 1993; Llabre and Hadi 1994; Yehuda et al 1995).

A number of non-biological factors might explain why females are found in some studies to suffer a greater incidence of PTSD following trauma. These include differences in population selection or sampling, differences in the nature of traumatic exposure across studies, use of divergent outcome measures, differential reporting bias among samples (i.e. women in some samples might be more willing to admit to symptoms than men), and failure to control for the effects of other variables correlated with gender, that might play a more relevant role in causation.

Factors known to have a particularly strong impact on stress response, and particularly likely to be more prevalent in women include: differential social learning during childhood development (Jacklin and Reynolds 1993; Lott and Maluso 1993), childhood sexual abuse (Zerbe 1995), spousal abuse (Magruder, Croutharmel, Mays, et al 1995), sexual harassment in the workplace, and feeling less in control at one's workplace (Hall 1989). According to Wenegrat (1995), the increased risk women face for many psychiatric disorders such as dissociative disorders, anxiety, conversion symptoms, depression, and eating disorders, result primarily from the fact that they are more likely to have been excluded from power in critical societal role functions.

In the course of analyzing results from a study of military health care workers following an air disaster, we discovered that one of two sub-samples of women appeared less likely to develop PTSD than the other. Both groups were studied with the same battery of psychological and demographic measures in prospective fashion over an 18 month period. Despite a relatively low sample size with an attendant high probability beta, The observation of consistent differences in a variety of other stress related measures between the two sub-groups indicated that reporting our findings would be instructive in the future design and interpretation of research on the role of gender in relation to risk for PTSD.

METHOD

A midair collision occurred at the annual Ramstein Air Force Base air show, Flutag, on 8/28/88 (time 0). Seventy of the 300,000 spectators watching the event were killed and 500 were injured. The dead included 8 children under 14 years of age, 4 youths between 14 and 18, 46 men, and 12 women. Dead and injured victims were lying on the ground. This created pandemonium at the scene. Dead and injured were everywhere. Most of the injured victims suffered burns. As the result of valiant efforts, all injured were evacuated within 90 minutes to approximately 20 area hospitals.

Rescue workers from two military bases, Ramstein AFB and Landstuhl Army Regional Medical Center (N=254), were surveyed approximately 2 months after the Ramstein AFB disaster (Time 1; October-November, 1988) and again at approximately 6 months (Time 2; March-April, 1989), 12 months (time 3; September, 1989), and 18 months (time 4; April, 1990). We refer to this first sample as "early responders."

In order to enlarge our sample size, an additional group of rescue workers denoted as "late responders," working at the same two bases (N=101), were surveyed only at times 2, 3, and 4. The combined sample included 355 subjects. Sampling methods differed somewhat at the two locations. Workers at the health clinic at Ramstein AFB were approached at time 1 by a military psychologist who distributed surveys to health workers by depositing them in their mailboxes, and later retrieved the surveys from subjects. At Landstuhl Army Hospital, which is a more comprehensive medical facility, a senior non-commissioned officer administered time 1 surveys to health workers on a day when all were required to come for their flu shots. The percentage of early responders (80.2%) at Ramstein was significantly greater than at Landstuhl (67.1%) (DF=1, chi-sq=6.69, p=.01). Breaking this difference down by gender showed that this difference was due to the fact that there was a significantly higher percentage of women who were early responders at Ramstein (88.1%) than at Landstuhl (65.1%) ((DF=1,

Chi-Sq=7.47, $p=.006$). The corresponding percentage of male early responders at Ramstein (76.0%) was not significantly different than at Landstuhl (68.0%) ($DF=1$ Chi-sq=1.58, $p=.21$).

At time 2, a more intensive effort was made to recruit subjects by depositing surveys in mailboxes (at both institutions). The second sample, referred to here as "late responders" were assessed at times 2, 3, and 4, only. Both sub-samples were clearly subject to selection bias. For example, it is probable that those individuals at Landstuhl privileged to possess a mailbox were more likely to be of higher rank, and less likely to come for their flu shot at the time 1 sampling.

Probable PTSD cases were identified using a multi-method with self-administered scales that have shown an acceptable level of sensitivity and specificity (Ursano, Fullerton, Kao et al, 1992, 1995). This method employs scores from the Symptom Checklist-90 Revised (SCL-90-R; Derogatis, 1983) augmented by 13 additional items created to cover all DSM III-R symptoms of PTSD, and from the total Impact of Events Scale (IES; Horowitz et al 1979). Subjects were classified as probable PTSD if they met DSM-III-R PTSD symptom distribution criteria on the augmented SCL-90-R, and scored 20 or higher on the IES.

Subjects were asked open-ended questions regarding their emotional reactions to the disaster and its aftermath at time 1 and time 2. By rating their written answers, we able discern five

categories of emotional response that included feeling depressed/sad, anxious/frightened, guilty, numb/zombie-like, and disbelief/confusion. The Zung self-rating Depression Scale (Zung 1965, 1967, 1969) was employed at times 2, 3, and 4, as a measure of depression. The Minnesota Multiphasic Personality Inventory PTSD Scale (MMPI-PTSD; Keane et al 1984) was administered at times 3 and 4 as another measure of PTSD symptomatology separate from our primary measures. The Hardiness Scale (Bartone 1991, Wiebe 1991) was administered either at time 1 or time 2 to subjects in order to assess the relationship between "resiliency" traits early in the course of the study and later outcome.

In order to assess the effects on outcome of both pre and post-disaster stressful life events, apart from exposure to the focal trauma of the air disaster and its aftermath, we administered the Recent Life Events scale (RLC; REFERENCE) at times 2 and 4. Measurements for the pre-disaster period at time 2, inquired about the number of stressful events during the 4 months prior to the crash. Also at time 2, we measured the total number of RLC events experienced by subjects during the 6-8 month period immediately following the disaster. At time 4, we surveyed subjects regarding the total number of RLC events they experienced during the 10-12 month period between April, 1989 and April, 1990 (6 - 18 months post-disaster).

In view of evidence that social support may exert a protective effect on outcome following trauma, subjects were queried about their perceived levels of social support from friends or family at times 1, 2, and 4. Similarly, subjects were surveyed about the presence of alcohol abuse at time 2, by use of the Michigan Alcohol Screening Test (MAST), because of evidence of significant correlations between exposure to trauma and alcohol use.

Subjects were queried about their health care work with disaster victims including child patients, burn patients, emergency room work, dead bodies, and patients who later died. Other questions surveyed the subjects' proximity to the actual disaster scene, worry about family members, and whether they had an opportunity for debriefing.

Statistical analysis employed SAS-VMS, version 6.1. Since most variables had a highly skewed distribution that failed to meet assumptions of normality, non-parametric tests for statistical significance were used in most instances. In cases where differences between means of a variable were compared using the SAS General Linear Model (PROC GLM) module, differences were assumed significant only when confirmed by a Wilcoxon Rank Sum Test. The probability of type II error (beta) for Chi-Square or Analysis of Variance contrasts, optimal sample sizes, and the results of Monte Carlo trials were calculated using Statistical Power Analysis (Borenstein and Cohen 1988).

RESULTS

A total of 355 respondents returned valid surveys. Forty-two (13.5%) out of 311 individuals with non-missing data met criteria for PTSD on at least one of the three survey times between 6 and 18 months. In the overall sample, 17.1% of women and 11.3% of men met criteria for PTSD at some point during the assessment period. For the total sample, this difference was not statistically significant ($DF=1$ Chi-Square=2.07 $p=.15$, probability beta=.71). Table 2 summarizes the 18 month prevalence of PTSD according to gender and sub-sample membership, probability betas for false negative findings, and the upper and lower range of percentage PTSD differences found between men and women in 100 Monte Carlo trial simulations of random samples taken from a hypothesized population with the same percentage breakdown of PTSD by gender as found in our study. Table 3 shows the breakdown of respondents according to gender, diagnosis, location and time of initial assessment,

The observed differences in PTSD prevalence between men and women depending on subjects' work location, and early versus late responder status, suggested that sampling played an important role in whether this effect was observed. For example, women in the early responder group had a significantly higher 18 month PTSD prevalence than early responder men (women - 20.5% versus men - 9.5%, Chi-square 5.13, $DF=1$, $p=.02$). We found no

significant difference in PTSD prevalence between men and women in the late responder group (women - 8.8% versus men - 14.9%, Fisher Exact Test two tail, $p=.54$) although there was a high probability of type II error (probability $\beta=.93$). With regard to subjects' place of work, we found that women in the late responder group were significantly more likely to be working at Landstuhl than at Ramstein (Landstuhl - $N=29$, 85.3% versus Ramstein - $N=5$, 14.7%; Fisher Exact Test two tail, $p=.006$).

In view of the high statistical probability that we could have failed to find a significant difference between late responder men and women because of low sample size, we examined the relationship of responder status and occupational location with other variables that were likely to be related to PTSD.

Table 4. summarizes the Spearman Rank Order correlations between various demographic, exposure, and test score variables with 18 month PTSD prevalence. On these analyses the following variables correlated significantly with PTSD: younger age, enlisted rank, lower education, single or divorced status, work with burn victims, work with child victims, exposure to dead bodies, death of one's own patients, a high IRI score, a low Hardiness score, a high Michigan Alcohol Screening score (MAST), a high PTSD score at times 2-4, the number of other stressful life events from 2-6 months post-disaster or from 6-18 months post-disaster, low perceived social support from either friends

or family at times 2 or 4, a high Zung Depression score at times 2-4, and a report by the subject of having felt anxious or numb or "zombie-like" after the disaster.

Multivariate logistical regression analyses were conducted to control for intercorrelation between variables, employing variables that were clinically meaningful for prospective prediction of PTSD. The variables fitting the best logistic model predicting 18 month PTSD prevalence included: the number of stressful post-disaster events between times 2 and 4, working with burn victims, and lower educational status. These same variables along with lower scores on the Hardiness Scale entered the best model predicting chronic PTSD, the latter defined in study as being identified as a PTSD case at 12 or 18 months. The Zung Depression Scale and the Keane MMPI-PTSD scale were also good "predictors" of PTSD, but were entered into separate models because of their high correlation with current PTSD symptomatology. The detailed results of logistical analyses will be presented in a separate publication.

As outlined in Table 5, Chi-Square or Fisher Exact Test contrasts showed that for men and women combined, late responders as a group regardless of sex, were more likely to be older, better educated, more likely to be married, more likely to have been exposed to dead bodies, less likely to have been at the site of the crash, and less likely to have felt numb or "zombie-like" afterwards. In terms of effects by gender, multivariate logistic

regression analyses showed that late responder women were significantly more likely than early responder women to have at least some college education (Wald Chi-Sq=6.68, $p=.01$, Odds Ratio - OR=2.5), and more likely to have been exposed to dead bodies following the disaster (Wald Chi-Sq=4.2, $p=.04$, OR=2.7). Logistic regression also revealed that late responder men were more likely to be married than early responder men (Wald Chi-Sq=9.2, $p=.003$, OR=4.8), less likely to have been at the site of the crash (Wald Chi-Sq=4.7, $p=.03$, OR=0.46), more likely to have been exposed to dead bodies (Wald Chi-Sq=6.9, $p=.008$, OR=2.6), and less likely to have felt numb or "zombie-like" after the disaster (Wald Chi-Sq=4.4, $p=.04$, OR=0.11).

Despite the high risk of false negative error, we suspected that late responder women were more similar to men than the early responder men with regard to symptomatic response to the disaster. For this reason, we examined sub-groups for differences on continuous measures of stress response within the 18 month study period. Such measures included the 12 month average Intrusion and Avoidant sub-scores of the Impact of Event Scale (IES) (times 2-4), 12 month average augmented SCL-90-R PTSD scores (times 2-4), the Keane-MMPI PTSD scale (time 3 and time 4), the Zung Depression Scale (times 2-4), the Hardiness score, and the Recent Life Events scores for time 0-2 and time 2-4. These findings are reviewed in Tables 6 and 7.

As expected from the fact that IES scores form one of the bases of our multi-method approach to identifying PTSD cases, early responder women scored higher on their 12 month average IES intrusion subscale compared to early responder men ($X=10.7$ versus 8.9 ; $DF=1,210$, $F=4.5$, $p=.03$). They also scored significantly higher than late responder women ($X=10.7$ versus 7.3 ; $DF=1,116$, $F=6.2$, $p=.01$). Similarly, early responder women scored higher on their 12 month average IES avoidant scores compared with early responder men ($X=10.9$ versus 8.0 , $DF=1,210$, $F=8.8$, $p=.003$), and higher than late responder women ($X=10.9$ versus 7.7 ; $DF=1,116$, $F=4.6$, $p=.03$). Early responder women also scored higher on the Recent Life Events scale for the period from time 2 to time 4, compared to early responder men ($X=6.6$ versus 5.1 , $DF=1,124$, $F=4.2$, $p=.04$). (See tables 6 and 7).

Early responder women scored significantly higher on 12 month average SCL-90-R PTSD scores than early responder men ($X=7.6$ versus 4.6 , $DF=1,252$, $F=8.8$, $p=.003$). Although early responder women had higher mean 12 month SCL-90-R PTSD scores than late responder women ($X=7.6$ versus 6.1 , $DF=1,123$, $F=0.8$, $p=.37$, probability beta=.86), these differences were not found to be significant. Obviously, the risk for false negative result was quite high in the latter comparison.

Early responder women had a significantly higher Keane MMPI-PTSD scores at time 3 in comparison with late responder women ($X=9.55$ versus 4.9 , $DF=1,65$, $F=4.7$, $p=.03$). Early responder

women also had higher Keane MMPI-PTSD scores at time 4 than late responder women, but this failed to meet statistical significance ($X=8.8$ versus 5.0 , $DF=1,62$, $F=2.7$, $p=.11$, probability $\beta=.62$).

On the Zung Depression Scale, early responder women scored significantly higher than late responder women at time 3 ($X=42.7$ versus 36.3 , $DF=1,65$, $F=5.2$, $p=.03$). Early responder women's Zung scores were also higher than late responder women at time 4 ($X=41.2$ versus 34.7 , $DF=1,64$, $F=4.3$, $p=.04$), but this missed confirmation of significance by the Wilcoxon Rank Sum Test ($Z=-1.85$, $p=.07$). Early responder women also scored higher than early responder men on the Zung Depression Scale at times 2, 3 and 4 (see tables 6 and 7). Late responder women differed from late responder men only on the Recent Life Events score for time 0 to time 2 ($X=4.4$ versus 3.0 , $DF=1,99$, $F=4.9$, $p=.03$). Late responder men had lower intrusion scores than early responder men ($X=6.7$ versus 8.9 , $F=8.0$, $p=.005$).

There were no differences in Hardiness scores among subgroups with regard to gender or early versus late response to the survey.

DISCUSSION

The exigencies of disaster research make it extremely difficult to obtain sufficiently large systematic or random samples, and even harder to achieve a balanced design for

contrasting risk differences based on gender. It is therefore hard to replicate a sampling method from one population to another, or to account for all of the factors that might bias selection. This was certainly the case in our study, where approximately one third of our population was not sampled at time 1, and differed markedly from the rest of the respondents on a number of demographic measures known to affect response to trauma, such as education (Breslau et al 1991), intelligence (McNally and Shin 1995), age, job status, or marital status. Within our group of late responders, women evidenced no greater chance of developing PTSD than men, and no differences in other stress-related measures.

Late responder women in our study appeared more similar to late responder men than to early responder women. The latter sub-group evidenced many differences on a variety of stress measures from the rest of the sample. Despite the high probability beta present in many of the comparisons, our findings suggest that sampling differences resulted in a differential response to stress among the two groups of women that was statistically related to late responder women having a level of education. Although late responder women (and men) were less likely to be at the actual site of the disaster, they were no less likely as health care workers to be exposed to the grotesque injuries suffered by burn victims and children. They were more likely than early responders to have been exposed to dead bodies.

A more complete understanding of gender effects on PTSD requires accounting for other factors likely to be incidentally associated with gender in a particular study. As previously cited in the NVVRS (Kulka et al, 1998), female Vietnam nurses exposed to high war zone stress had more education and higher rank than male combat troops. The NVVRS is a problematic example because of the difficulty equating combat exposure with military nursing. A better comparison is found in the work of Bar-Tal, Lurie and Glick (1994). They studied the perceived level of war-related and work-related stress exposure, coping methods, and measured psychological distress of Israeli army officers and Non-commissioned Officers (NCO's) as well as a group of civilian females. Female army officers reported higher levels of perceived stress than male officers and female civilian controls, but demonstrated more active behavioral coping. Although female officers' social support seeking was more effective than the other two groups, their active behavioral coping was no less effective than the male officers. After controlling for the level of perceived stress exposure, both female and male officers suffered from lower psychological distress measures than the female civilians. Controlling for the interaction between the measured variables showed that the female officers were more similar to their male counterparts than to the female civilians, suggesting that their coping behavior was more related to their role as army officers than to their sex. Using similar measures with a group of 350 Israel enlisted soldiers (women= 200; men =150), the same investigators (Lurie, Bar-Tal, and Glick 1995)

found that females suffered higher levels of stress and psychological symptoms, suggesting that enlisted as opposed to officer status may have played an important interactive role with gender in stress response.

A possible explanation for the differences found in our study between late and early responder women is that the former were more experienced in a variety of ways with regard to dealing with the types of trauma the Ramstein Air disaster presented. Training provides an inner sense of control that offers a way of "metabolizing" horrifying and shocking images (Hall 1989). For this reason, future studies that address gender effects on outcome after trauma, should take into account the unexpected effects of sampling methods, the age, maturity, education, training level and sense of control experienced by respondents when exposed to trauma. In view of way that the probability of type II errors limited the reliability of some of the negative contrasts related to gender effects in our study, future studies should carefully attend both to sample size, and to multiple methods of stress assessment.

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TABLE 1

COMPARISONS OF TYPE II (FALSE NEGATIVE) ERROR AND SAMPLE SIZE
IN STUDIES REPORTING RATES OF PTSD BY GENDER

CATEGORY OF STUDY	AUTHORS	TRAUMA POPULATION	MEN			WOMEN			CHI-SQ., OR FISHER EXACT SIGNIFICANCE	PROB OF FALSE NEG (BETA)	N ₁ AND N ₂ REQUIRED FOR BETA OF 0.20
			SAMPLE N ₁	PTSD N (%)		SAMPLE N ₂	PTSD N (%)				
STUDIES SHOWING NO GENDER DIFFERENCE IN PTSD RATE, OR MEN GREATER THAN WOMEN	HOVENS ET AL 1994	DUTCH RESISTANCE FIGHTERS WWII	680	186 (27.3)		144	29 (20.1)		.07, N.S.	.55	546, 546
	KULKA ET AL, 1988	VIETNAM VETERANS HIGH EXPOSURE	406	125 (30.8)		170	23 (13.5)		.001	.00	89, 89
	MADAKSIRA & O'BRIEN, 1987	TORNADO VICTIMS	29	18 (62)		82	51 (62)		N.S.	.97 ¹	754, 754 ¹
STUDIES SHOWING WOMEN WITH HIGHER RATE OF PTSD THAN MEN	BRESLAU ET AL, 1991	URBAN HMO ENROLLEES	386	23 (6.3)		621	70 (11.3)		.005	.23	588, 588
	WOLFE, BROWN, & KELLY, 1993	PERSIAN GULF VETERANS ²	2136	83 (3.9)		208	19 (9.1)		.001	.17	352, 352
	SHORE, VOLLMER, & TATUM, 1989	MOUNT ST. HELENS DISASTER VICTIMS	274	2 (0.72)		274	10 (3.6)		.04	.48 ³	329, 329

N.S.: NOT SIGNIFICANT

1: CALCULATION BASED ON ASSUMING A 7 POINT DIFFERENCE IN PTSD PERCENTAGE BETWEEN MEN AND WOMEN.

2: BASED ON MISSISSIPPI PTSD SCALE SCORES

3: BASED ON CHI-SQUARE WITH YATES CORRECTION

TABLE 2. 18 MONTH PREVALENCE OF PTSD ACCORDING TO GENDER AND SAMPLING SOURCE

Number of Cases	Men (%)	Women (%)	Total	Within row Chi-square*	Within row Probability*	Within row Beta	RANGE OF % PTSD DIFFERENCE BETWEEN WOMEN AND MEN IN 100 MONTE CARLO TRIALS
PTSD, total sample	22 (11.3)	20 (17.1)	42 (13.5)	2.07	.15, N.S.	.71	UPPER LOWER +17%, -6%
PTSD, early responders	12 ^A (9.5)	17 ^B (20.5)	29 ^C (13.8)	5.13	.02	.41	+23%, -3%
PTSD, late responders	10 ^A (14.9)	3 ^B (8.8)	13 ^C (12.9)	**	.54, N.S.	.93 ¹	+15%, -18%
PTSD, Ramstein	10 ^D (14.5)	8 ^E (20.5)	18 ^F (16.7)	0.65	.42, N.S.	.88	+25%, -17%
PTSD, Landstuhl	12 ^D (9.6)	12 ^E (15.4)	24 ^F (11.8)	1.54	.21, N.S.	.77	+19%, -7%

* Chi-squares and probabilities in last two columns refer to contrasts between percentage prevalence of PTSD differentiating male and female sub-groups on the same row.

N.S.: Not significant.

** Fisher Exact Test, two tailed

A,C,D,E,F: No significant difference between percentages sharing the same letter.

B: Fisher Exact Test (two tailed), $p=.42$, (not significant). Probability Beta=.75 (calculated on Chi-Sq with Yates correction). The required sample sizes required to show a significant difference for contrast between late responder women and early responder women would be 160 in both groups.

1: Calculated on the basis of Chi-square test with Yates correction.

TABLE 3. BREAKDOWN OF SUB-SAMPLES BY TIME AND LOCATION OF RESPONSE

Response type	Sample location	Men Number (%)	Women Number (%)	Men and women Number (%)
Early Responders	Ramstein	60 (37.0) ^a	37 (40.7) ^b	97 (38.2) ^c
	Landstuhl	102 (63.0)	54 (59.3)	157 (61.8)
Subtotal		162 (70.7)	91 (72.8)	254 (100.0)
Late Responders	Ramstein	19 (28.4) ^a	5 (14.7) ^b	24 (23.8) ^c
	Landstuhl	48 (71.6)	29 (85.3)	77 (76.2)
Subtotal		67 (29.3)	34 (27.2)	101 (100.0)

A: Chi-Square = 1.58, DF=1, p=.21 N.S.

There was no significant difference in percentages of early versus late response status between workers at Ramstein and Landstuhl.

B: Fisher Exact Test (two tail), p=.006.

Women at Ramstein were significantly more likely to be early responders than women at Landstuhl.

C: Chi-Square = 6.69, DF=1 p =.010.

There was a significantly higher percentage of early responders at Ramstein than at Landstuhl in the overall sample.

TABLE 4. SPEARMAN RANK ORDER CORRELATIONS
OF SELECTED VARIABLES WITH PTSD

Variable	Rank order correlation with PTSD
Age	-.122 *
Sex female vs. male	.082 n.s.
Race white vs. other	.045 n.s.
Education high school vs. college	.200 ***
Enlisted rank vs. officer	.200 ***
Married vs. single or divorced	-.062 n.s.
Worked with burn patients	.165 **
Worked with child victims	.162 **
Exposed to dead bodies	.124 *
One's patients died	.141 *
Emergency room work	.083 n.s.
Worked at disaster site	.051 n.s.
Early vs. late response	.013 n.s.
Work at Landstuhl vs. Ramstein	-.067 n.s.
Total IRI score	.184 *
Total Hardiness score	-.123 *
Michigan Alcohol (MAST) Score	.200 ***
Marlowe Crowne score	-.090 n.s.
Keane PTSD-MMPI score (T3)	.554 ***
Keane PTSD-MMPI score (T4)	.548 ***
Recent life events (T0-T2)	.275 ***
Recent life events (T2-T4)	.221 **
Social support friends (T2)	-.140 *
Social support family (T2)	-.190 **
Social support family (T4)	-.287 ***
Zung Depression Scale (T2)	.401 ***
Zung Depression Scale (T3)	.515 ***
Zung Depression Scale (T4)	.486 ***
Felt anxious	.138 *
Felt numb or "zombie-like"	.144 *

n.s. = not significant
 * p < .05
 ** p < .01
 *** p < .001

T0 = Time of disaster
 T2 = Time 2 (6 months)
 T3 = Time 3 (12 months)
 T4 = Time 4 (18 months)

TABLE 5. COMPARISON OF LATE RESPONDERS TO EARLY RESPONDERS BY GENDER: PERCENT OF RESPONDENTS IN EACH CATEGORY

Variable	Late responders			Early responders		
	Men	Women	Combined men and women	Men	Women	men and women
Age less than 29	22.4%	38.2%	27.2% ^A	37.7% ¹	55.0% ¹	44.1% ^A
High school education or less	6.5%	0.0% ^B	4.0% ^C	15.6%	14.3% ^B	15.1% ^C
Caucasian	79.1%	85.2%	81.2%	75.8%	75.8%	75.5%
Worked with burn victims	59.7%	61.8%	60.4%	53.7%	52.2%	53.4%
Married	92.4% ^{2,D}	58.5% ²	81.0% ^E	72.5% ^D	45.5%	62.7% ^E
Enlisted rank	54.6% ^F	51.5%	53.5% ^G	70.7% ^F	68.5%	70.0% ^G
Worked with child victims	44.8% ³	17.7% ³	35.6%	37.3%	34.4%	36.1%
Exposed to dead bodies	32.8%	32.4%	32.7% ^H	23.1%	16.5%	21.0% ^H
Had patients die	32.8%	30.3%	35.6%	31.4% ⁴	19.3% ⁴	36.1%
Was at the site of crash	25.8%	20.6%	24.0% ^I	38.1%	29.7%	34.9% ^I
Worked in Emergency Room	38.8%	32.4%	36.6%	36.0%	28.9%	33.3%
Felt anxious or frightened	3.0% ⁵	17.7% ⁵	7.9%	3.2% ⁶	14.4% ⁶	7.3%
Felt numb or zombie-like	1.5% ^J	2.9% ^K	2.0% ^L	13.2% ^J	18.9% ^K	15.2% ^L
Michigan Alcohol Score > 5	20.9%	23.5%	21.8	21.0%	18.7%	20.1%

Differences not linked by a common superscript within a given row were not found to be statistically significant.

Items sharing a common numerical superscript denote significant differences between males and females within early or late response categories.

Items sharing a common alphabetical superscript denote significant contrasts across response categories (e.g., late response men versus early response men). Items with significantly higher percentages in a given comparison are underlined.

Chi-square or Fisher Exact Tests:

1: p=.02 3: p=.007 5: p=.03 A: p=.02 C: p=.002 E: p=.001 G: p=.004 I: p=.05 K: p=.02
 2: p=.0001 4: p=.05 6: p=.003 B: p=.01 D: p=.0007 F: p=.03 H: p=.02 J: p=.003 L: p=.00009

TABLE 6. COMPARISON OF MEN AND WOMEN ON MEASURES OF STRESS
GROUPED BY SUB-SAMPLE

Variable	Mean values Late responders			p *	Mean values Early responders			p *
	Men	Women	F		Men	Women	F	
MMPI-PTSD Scale Time 3	7.8	4.9	2.38	n.s.	6.9	9.6	2.75	n.s.
MMPI-PTSD Scale Time 4	8.5	5.0	2.61	n.s.	6.2	8.8	3.20	n.s.
Zung Depression Time 2	38.8	41.4	1.51	n.s.	38.8	41.9	3.73	.05
Zung Depression Time 3	39.8	36.3	1.68	n.s.	37.0	42.7	8.30	.005
Zung Depression Time 4	39.5	34.7	2.51	n.s.	36.1	41.2	7.81	.006
IOE Intrusion (average)	6.7	7.3	0.27	n.s.	8.9	10.7	4.54	.03
IOE Avoidant (average)	7.1	7.7	0.16	n.s.	8.0	10.9	8.80	.003
SCL-90-R PTSD (average)	6.4	6.1	0.02	n.s.	4.6	7.6	8.78	.003
Other stressful events 6 months post crash	3.0	4.4	4.93	.03	3.1	3.4	0.42	n.s.
Other stressful events 6 to 18 months post crash	7.3	5.0	2.47	n.s.	5.1	6.6	4.19	.04
Hardiness Scale	60.1	61.1	0.40	n.s.	61.4	61.2	0.04	n.s.

n.s.: Not significant

* All significant p values are also significant using the Wilcoxon Rank Sum Test.

Underlined items denote a significantly higher percentage scoring on a given variable comparing men versus women within a given sub-sample (late or early responders).

TABLE 7. COMPARISON OF WITHIN GROUP MEASURES STRESS ACCORDING TO EARLY
OR LATE RESPONSE STATUS

Variable	Mean values Men			Mean values Women			p value
	Late	Early	F	Late	Early	F	
MMPI-PTSD Scale Time 3	7.8	6.9	0.32	4.9	<u>9.6</u>	4.71	.03
MMPI-PTSD Scale Time 4	8.5	6.2	2.33	5.0	8.8	2.68	n.s.
Zung Depression Time 2	38.8	38.8	0.00	41.4	41.9	0.04	n.s.
Zung Depression Time 3	39.8	37.0	1.95	36.3	<u>42.7</u>	5.19	.03
Zung Depression Time 4	39.5	36.1	3.22	34.7	<u>41.2</u>	4.28	.04
IES Intrusion (average)	6.7	<u>8.9</u>	8.02	7.3	<u>10.7</u>	6.24	.01
IES Avoidant (average)	7.1	8.0	0.83	7.7	<u>10.9</u>	4.60	.03
SCL-90-R PTSD (average)	6.4	4.6	2.39	6.1	7.6	0.80	n.s.
Other stressful events 6 months post crash	3.0	3.1	0.04	4.4	3.4	3.10	n.s.
Other stressful events 6 to 18 months post crash	7.3	5.1	5.36	5.0	6.6	2.65	n.s.
Hardiness Scale	60.1	61.4	1.25	61.1	61.2	0.00	n.s.

* All significant p values are also significant using the Wilcoxon Rank Sum Test.

Underlined items denote a significantly higher percentage scoring on a given variable
comparing late versus early response for each sex.

Chapter 4

Responses in Spouses of Disaster Workers Following the 1989 United Airlines Crash, Sioux City, Iowa

Carol S. Fullerton, & Robert J. Ursano

Responses in Spouses of Disaster Workers Following the 1989 United Airlines Crash, Sioux City, Iowa

Carol S. Fullerton, Ph.D. & Robert J. Ursano, M.D.

OVER THE PAST DECADE there has been a plethora of research on trauma and disaster. Increasingly, exposures to trauma and disaster have been linked to psychological and health outcome. Bearing witness to a trauma or being confronted by the traumatic experience of a family member or close friend is now defined as a significant stressor in DSM-IV (American Psychiatric Association 1994). Much less is known about this type of exposure. In particular, we know very little about how those who hear about traumatic events - but who did not witness the actual event. In order to examine this phenomena of exposure through the eyes of a "secondary victim", we examined the spouse/significant others of disaster workers in the Air National Guard who responded to the mass-casualty United plane crash in Sioux City, Iowa.

This paper examines the indirect exposure of the Spouse/Significant Others (SSOs) of disaster workers following a mass-casualty airplane crash. This study is unique in that we recruited and examined the acute and long-term impact on the family member who is exposed to the disaster through another. We compared to two matched control groups. The SSOs were not directly exposed to the trauma, but had exposure to their partner who performed disaster work at the site of the crash.

This preliminary study addresses several important issues; (1) Do the SSOs of disaster workers provide support? (2) Do the SSOs of disaster workers receive support from family and friends? (3) Do the SSOs of disaster workers experience psychological and physiological stress? (4) Is providing support associated with psychological distress in the SSOs of disaster workers? and (5) Is the stress of the disaster worker SSO associated with the stress of the disaster worker?

POSTTRAUMATIC STRESS DISORDER

Although PTSD is usually associated with primary exposure to trauma, the family member may also develop PTSD and related symptoms. Prior to the

advent of the DSM-IV (American Psychiatric Association 1994), the DSM-III-R (American Psychiatric Association 1987) stressor criterion for PTSD included "... a serious threat or harm to one's children, spouse, or other close relatives and friends" (pg. 250). The DSM-IV stressor criterion includes "... Events experienced by others that are learned about [such as].... violent personal assault, serious accident, or serious injury experienced by a family member or a close friend; learning about the sudden unexpected death of a family member or close friend..." (pg. 424). Thus, family members of victims as well as of disaster workers who are at risk of injury, are recognized as potential traumatic stress victims.

SUPPORT PROVISION

In addition to the symptoms of PTSD which may result from hearing about a trauma of a family member, support providers are subject to other characteristic symptoms because of their role as support providers (one of the potential stressors inherent in SSOs of disaster workers). It is beyond the scope of this chapter to review in detail this body of literature. For an overall review, we suggest Biegel et al. 1991; and for a review specific to emotional disturbance in the family, see Brody and Sigel 1990.

A substantial amount of research documents the beneficial health effects of receiving psychosocial support from spouses, other family members and friends at times of stress (for reviews see, Cohen and Wills 1985; House et al. 1988). This is true after large scale traumatic events (e.g., Green et al. 1985; Solomon et al. 1989). However, providing support to family members can be stressful for the support provider and puts strain on the family unit, particularly following traumatic event exposure (Shumaker and Brownell 1984; Solomon et al. 1987; Taylor 1990; Fullerton et al. 1993). Although women may be more likely than men to respond in a supportive manner during times of stress (Kessler and McLeod 1984), women may also experience strong social supports as burdensome during these times (Solomon et al. 1987).

Psychiatric Effects of Support Provision. Symptoms associated with the stress of familial support provision include: depression, hostility and anxiety. A number of studies reported elevated rates of depression among support providers when compared to those not providing support matched on age and gender (e.g., Gallagher et al. 1989; Kiecolt-Glaser et al. 1987; Stoller and Pugliesi 1989; Pruncho and Potashnik 1989). The more impaired the patient, the greater the depressive symptomatology in the support provider. Female support providers tended to be more depressed than males. Using the Brief Symptom Inventory (BSI) to assess psychiatric symptoms in support providers of dementia patients, Anthony-Bergstone et al. (1988) found elevated levels of hostility compared to population norms in both men and women support providers who were young, or

at least 60 years old (vs. those in the middle). High levels of anxiety followed a similar age pattern in the women support providers, but not in the men providing support, and high levels of depression were found only in older women (Anthony-Bergston et al. 1988). Fitting et al. (1986) found higher rates of depression in female vs. male support providers to dementia patients using the Minnesota Multiphasic Personality Inventory (MMPI). In a study of the wives of combat veterans suffering from combat stress reaction and PTSD, Solomon et al. (1991) found increased somatic complaints and psychiatric distress among the wives. Solomon et al. suggested that stress in the wives was associated with the increased responsibility secondary to the husband's illness, and with identification with the husband's symptoms.

Physical Health. Providing support is associated with poorer self-reported physical health. Haley et al. (1987) found that support providers reported poorer overall health and more chronic illness than a group of matched non-support providers. In a survey of 678 elderly people, Satariano et al. (1984) found that ill-health of one spouse was a strong predictor of poor health in the other spouse. The mechanisms which propagate poor health in support providers are unclear. Certainly they include the stress of support provision itself, empathy (Davis 1983), and shared environmental exposure.

Studies of health care utilization in support providers have shown conflicting results. Although studies have found that support providers report more frequent physician visits and more frequent use of prescription drugs than do non-support providers (Haley et al. 1987), other studies have reported no differences in support providers use of medical services (Kiecolt-Glaser et al. 1987). Several studies reported high rates of psychotropic drug use in support providers (e.g., Clipp and George 1990; George and Gwyther 1986). At times, the demands of providing support itself may limit the opportunity to use health care and may result in changes in health behaviors. Pennebaker and colleagues (Pennebaker and Susman 1988; Pennebaker et al. 1988) found a relationship between disclosure of traumatic events, fewer health center visits, and decreased autonomic arousal. Pennebaker suggested that the couple relationship and communication patterns may effect health care utilization and health outcomes.

PSYCHOSOCIAL RESPONSES IN SPOUSE/SIGNIFICANT OTHERS OF DISASTER WORKERS

FOLLOWING A PLANE CRASH: A PRELIMINARY REPORT

We conducted a preliminary investigation of the acute posttraumatic stress in the spouse/significant others (SSOs) of disaster workers following a mass-casualty airplane crash, and two matched control groups. The SSOs were not directly exposed to the trauma, but had exposure to their mate who performed disaster work at the site of the crash. In this report we examine the support

provided by disaster worker SSOs, the distress in these SSOs, and preliminary data on the relationship between distress in the SSO and distress in the disaster worker. We are currently analyzing the longitudinal data and additional comparisons which will be reported elsewhere.

THE DISASTER

On July 19, 1989, a United Airlines' DC-10 carrying 297 passengers and crew was forced to crash land at Sioux City, Iowa following a midair explosion which caused complete failure of the plane's hydraulic system. Casualties included 112 people who died and 59 who were seriously injured. Rescue personnel were alerted approximately one-half hour prior to the attempted landing which occurred on an unused runway at the Sioux Gateway Airport. They awaited the attempted landing just off the runways. On landing the plane broke apart and burst into flames. The wreckage was scattered on and off the runway and in adjoining corn and soybean fields. Some victims, still in their seats, were thrown from the aircraft. Others died in the burning of the fuselage. Of the 184 survivors, more than 70 literally walked away from the crash.

CONSULTATION AND RESEARCH TO DISASTER

Our research/consultation group initiated a longitudinal follow-up of the disaster workers and provided consultation to the community. One month following the disaster, 440 surveys were distributed to the Sioux City Air National Guard disaster workers. A total of 212 surveys were completed and returned by the disaster workers (48% return rate). Disaster workers also received surveys for their SSOs, if appropriate. Approximately 70% ($n = 148$) of the 212 disaster workers who completed the surveys were married. Out of the potential 148 disaster worker SSOs, a total of 133 completed and returned surveys (90% return rate).

Concurrently, we distributed surveys to two comparison groups: (1) Sioux City Air National Guard members who did not participate in the disaster work for a variety of reasons (e.g., away at the time, could not get onto the Base) and their SSOs; and (2) Air National Guard (and SSOs) from Sioux Falls, South Dakota (a similar community 90 miles away, matched for socioeconomic level, geography, urban/rural location and military unit/job). Of the 750 Sioux City non-workers, 102 agreed to participate and completed surveys. Of the 102 non-workers, approximately 70% ($n = 71$) were currently married. A total of 63 non-worker SSOs (89%) completed and returned surveys. Of the Sioux Falls Air National Guard unit, 428 surveys were completed, with approximately 300 (70%) currently married. A total of 255 Sioux Falls Guard SSOs (85%) completed and returned

surveys. The median completion date, 2 1/2 months post-disaster, did not differ across the study groups.

Assessments. We measured demographic data, prior disaster experience, receiving and giving support, activities with SSO, stress on oneself and family members, medical care utilization, sleep patterns, fatigue immediately following the disaster, identification with disaster victims, and major life events. Standardized and self-report measures were used to assess psychological symptomatology, coping, social support, and other variables.

Subjects. Our preliminary study examined the disaster worker SSOs (N = 135) who completed the one month post-disaster questionnaire and the two matched SSO control groups, the non-worker SSOs (N = 63) and the Sioux Falls SSOs (N = 255). The SSO groups did not differ on demographics (see Table 2) and rate of survey return. The majority of the SSOs were married (most were married to enlisted men), white females in their late 30's (mean age = 38), with at least some college. No difference on socioeconomic status were indicated by homogeneity of education and husbands' rank. However, the percent of SSOs who were employed varied across the disaster worker SSOs, non-worker SSOs and Sioux Falls SSOs, 61%, 50% and 38% respectively; ($\chi^2 = (2) 18.995$, $p < .001$).

RESULTS

Support Provided by SSOs. The majority of the disaster worker SSOs reported providing support (83.33%). This was significantly higher compared to 42.62% of the non-worker SSOs and 63.21% of the Controls (chi-square for the 3 groups; $\chi^2 = 33.374(2)$, $p < .001$) (see Table 3).

Support Received from Family and Friends. Social support from family and friends were assessed separately by self-report Likert scales (1 = unsupportive, 2 = neutral and 3 = supportive). The majority of the worker SSOs reported receiving support from family (83.05%) at the time of the disaster and the week that followed (see Table 3). In the control groups, 73.91% of the non-worker SSOs, and 59.59% of the Sioux Falls SSOs reported receiving support from family. The overall chi square (for the 3 SSO groups) was significant ($\chi^2 = 28.704(4)$, $p < .001$). Receiving support from friends was reported by 77.48% of the Worker SSOs, 59.52% of the Non-Worker SSOs and 48.92% of the controls ($\chi^2 = 23.948(4)$, $p < .001$).

Intrusive and Avoidant Symptoms: We used the Impact of Event (IES) (Horowitz et al. 1979) to examine the intrusive and avoidant symptoms in the

disaster worker SSOs during the first week post-disaster. The disaster worker SSOs had IES total scores of $M = 25.20$, $SD = 16.43$ during the first week post-disaster, compared to the non-worker SSOs ($M = 22.22$, $SD = 15.90$), and the Sioux Falls SSOs ($M = 13.58$, $SD = 13.09$) ($F = 30.20$, (2,443), $p < .0001$). Using the IES thresholds identified by Horowitz (1979) (which correlate with levels of clinical concern: low = < 8.5 , medium = $8.6-19.0$, and high > 19.0), 59.54% of the disaster worker SSOs scored in the high level of clinical concern compared to 47.62% of the non-worker SSOs, and 26.59% of the Sioux Falls SSOs ($\chi^2 = 51.741$ (4), $p < .001$). These results can be compared to the IES scores reported by Steinglass & Gerrity (1990) for two disaster community samples. Steinglass and Gerrity found that at four months 76% of the population of a community struck by a tornado and 49% of a community struck by a flood scored in the high clinical concern group on the IES.

Self Reported Stress. Self-reported stress during the first week after the crash was measured on a Likert scale from 1 to 7 (1 = none; 7 = high). Mean scores for worker SSOs, non-worker SSOs and Sioux Falls SSOs were: $X = 3.88$ ($SD = 1.57$), $X = 3.68$ ($SD = 1.53$), and $X = 3.26$ ($SD = 1.49$), respectively ($F = 7.66$, (2,435), $p < .001$). Post-hoc multiple comparisons (Bonferroni corrected) indicated a significant difference between the worker SSOs and the Sioux Falls SSOs ($p = .001$). No other pairs differed significantly. The self report measures were moderately to highly correlated with the total IES, intrusion and avoidance scores.

Sleep and Fatigue and Return to Normal Pace. The disaster worker SSOs reported a mean of 6.50 ($SD = 1.24$) hours of sleep during the week after the disaster. Fatigue the day after the disaster was assessed on a Likert scale (0 = none to 7 = very). Mean fatigue was moderate for the disaster worker SSOs ($X = 3.73$, $SD = 1.82$). Of the disaster worker SSOs, 19.08% reported that it took from 1 to 2 days after the plane disaster for symptoms of physiologic stress to subside (e.g., "adrenalin stopped pumping", "pace back to normal"), 21.37% reported taking from 3 to 4 days, 11.45% reported 5 to 6 days, 11.45% reported that it took greater than one week post-disaster to return to a normal pace, and 36.64% reported no change in their normal pace following the disaster.

Health Care Utilization. In order to further assess behavioral measures of physical illness we examined health care utilization. Health care utilization was measured by the number of people seeing a Physician for: annual physical check-ups, physical problems, and emotional problems the past three months. In the worker SSOs, 3.2% reported seeking help for emotional problems, 10.5% obtained annual physicals, and 16.9% saw a physician for physical problems.

Providing Support and Acute Stress (IES). The disaster worker SSOs who provided support had substantial levels of stress 1 week post-disaster. The disaster worker SSOs who provided support had higher total IES and higher

levels of IES intrusive symptoms compared to the disaster worker SSOs who did not provide support (Total IES = 27.0 vs. 18.8; IES Intrusion = 15.7 vs. 10.1, for support providers vs. non-providers, respectively (see Table 4). Avoidant symptoms did not differ significantly in support providers vs. non-providers.

Anxiety and Depression 2 months Post-Disaster. At 2 months post-disaster, 26.7% of the disaster worker SSOs who reported providing support were at the 90th percentile of depression, and 22.2% were at the 90th percentile for anxiety on the SCL-90-R (Derogatis 1983).

Acute IES in the Disaster Worker SSO Compared to that of the Disaster Worker (one week post-disaster). The disaster worker SSO total IES score one week post-disaster was significantly correlated with that of the disaster worker ($r = .22$, $p = .02$). Further analyses indicated that the correlation was primarily related to intrusive symptoms, i.e., the SSO level of intrusive symptoms was moderately correlated with that of the disaster worker ($r = .27$, $p = .004$). Symptoms of avoidance in the SSO were not correlated with that of the disaster worker.

DISCUSSION

Posttraumatic stress in familial support providers following acute trauma has not been well studied. The mechanisms of transmission of posttraumatic stress to familial support providers following acute trauma exposure of a family member are not well understood. The SSOs in this study provide substantial support to the disaster workers and receive support from both family and friends. The disaster worker SSOs also report substantial intrusive and avoidant symptoms and self-reported distress. They report decreased sleep after a disaster and many take several days to weeks to "come back to normal." Little can be said about health care utilization until comparisons can be made with the control groups. Those disaster worker SSOs who report providing support also report substantial distress and more intrusive symptoms than those SSOs who did not provide support. It seems reasonable, therefore, to suggest that exposure as a disaster worker SSO may be a risk factor for psychiatric distress after a disaster. It should be remembered that this disaster, although sudden and unexpected, was not enduring and did not involve substantial separation or direct effects on the SSOs as might be true in wide-spread natural disaster such as an earthquake. Thus, findings of significant distress in this disaster worker SSO group represents nearly pure exposure to the disaster worker as the source of the SSOs distress (i.e. without the confounding effects of other event-related exposure).

Several mechanisms are possible for the distress and potential illness in disaster worker SSOs: (1) fear and anticipated loss secondary to partner's trauma exposure; (2) the demands of providing support itself; (3) non-reciprocal support; (4) recall of one's own past traumatic events; (5) limited attention to own needs for social support/support networks and health care utilization; (6) poor health behaviors; (7) identification with partner's distress; (8) repressed feelings of dissatisfaction or anger at the disaster worker; and (9) experiencing the distress of others in the disaster community (see Table 5).

Posttraumatic Stress and Support Provision in the SSOs of Disaster Workers. Disaster workers are likely to be unprepared for a disaster of substantial magnitude and as a result, needed increased support from their SSOs. The relationship between the disaster workers' expectations of support and the actual support received may be important to subsequent expectations placed on the SSO (Kaniasty et al. 1990), and thus stress in the caregiver SSO and the couple relationship. The psychosocial support given to the disaster worker may not be reciprocated to the SSO. These factors may contribute to the stress in SSO caregivers (Ingersoll-Dayton and Antonucci 1988). The exposure of the disaster worker to threat and death may directly lead to fear and concern over loss and the future in the SSO. Thus, exposure to the disaster worker, the need to provide support to the disaster worker and the vicarious exposure to the disaster may put the support provider at risk for posttraumatic symptoms.

Being close to someone exposed to a traumatic event can be a powerful reminder of earlier stressful or traumatic experiences in our own lives (Holloway and Ursano 1984). Lifton (1993) suggested that the patterns of the survivor's experience may recall in those close to the survivor similar feelings from their own past (e.g., separation and threat). For example, it is difficult to avoid the modern-day media coverage of large-scale disasters and recent warfare. For many, bearing vicarious witness to current traumatic events recalls or reconstructs our own past events. In a similar way, one mechanism of transmission of exposure to traumatic stress from disaster workers to their SSOs is the recall of past stressors.

Physical Health in the SSOs of Disaster Workers. Direct measure of health care utilization along with the more commonly used self-report can provide a more complete picture of health responses following trauma in SSOs of disaster workers. Change in health behaviors (e.g., diet, exercise, and sleep, weight, smoking, and alcohol) are one mechanism by which stress can affect health (Coyne and Holroyd 1982; Wetzler and Ursano 1988). Langlie (1977) found that people with many demands on their time reported feeling a lack of control and perceived the costs of maintaining good health practices as high. This may be particularly true in support providers after a disaster.

Increased alcohol consumption and smoking are also commonly reported by people in high stress conditions as compared to low stress conditions

(Horowitz et al. 1979; Schachter et al. 1977), possibly as self-medication. Findings from the Alameda County Study (Berkman and Breslow 1983; Wingard and Berkman 1985) indicate a positive association between social networks and health behaviors (i.e., hours of sleep, drinking, smoking, physical exercise, and weight (for review, see House et al. 1988). Thus, decreases in social networks themselves due to the demands of support provision may effect health or health behaviors.

Another mechanism for disturbed health in SSOs of disaster workers may be their own posttraumatic stress disorder. Waigandt et. al's (1990) 2 year follow-up of 51 rape victims found significant differences between the victims and matched controls in current illness symptoms (e.g., high or low blood pressure, severe colds, headaches, stomach pains) measured by the Cornell Medical Index Health Questionnaire. Similarly, the relationship of PTSD and health may be mediated by health behaviors in caregivers. A relationship between PTSD and poor health practices has been found in veterans (Card 1987; Shalev et al. 1990) and in non-veteran community samples (Gleser et al. 1981; Helzer et al. 1987). Helzer et al. (1987) found that those in the general population with PTSD were more likely to have drug and alcohol abuse. Substance abuse is a common comorbid disorder in veteran populations with PTSD (Kulka et al. 1990). Shalev et al. (1990) reported increased cigarette use among individuals with PTSD. In a sample of Buffalo Creek disaster victims, Gleser et al. (1981) found a 44% increase in cigarette smoking, a 52% increase in the use of prescription drugs, along with significantly increased alcohol consumption.

CONCLUSIONS

Although none of the SSOs of the disaster workers in our study were direct victims of the plane crash, nor were they exposed to the disaster site, they still showed moderate levels of posttraumatic distress from their exposure via the disaster workers. Future research should examine SSOs to further elucidate the mechanisms or avenues of transmission of stress, altered health, and health behaviors in disaster worker SSOs. This will enable identification of SSOs at high-risk of posttraumatic stress and altered health. The development of interventions to decrease distress in the SSOs will also increase the support available to the disaster workers. The involvement of SSOs in debriefing and education programs for disaster workers after a disaster event may be reasonable first interventions to accomplish these goals.

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Table 1

DEMOGRAPHICS

Disaster Worker SSO, Non-Worker SSO, & Sioux Falls SSO

	Worker SSO N= 133		Non-Worker SSO N = 63		Sioux Falls SSO N = 255	
	Mean	(SD)	Mean	(SD)	Mean	(SD)
AGE	37.73	(9.33)	35.68	(8.72)	37.10	(9.41)
	N	(%)	N	(%)	N	(%)
SEX						
Male	3	(2%)	7	(11%)	14	(6%)
Female	130	(98%)	56	(89%)	241	(94%)
RACE						
White	132	(99%)	63	(100%)	252	(99%)
Non-White	1	(1%)	0	(0)	3	(1%)
MARITAL STATUS						
Married	124	(93%)	57	(90%)	237	(93%)
Single	9	(7%)	6	(10%)	18	(7%)
EDUCATION						
High School	50	(37%)	31	(50%)	81	(32%)
Some College	57	(43%)	20	(31%)	128	(50%)
College Degree +	26	(20%)	12	(19%)	46	(18%)
EMPLOYED*						
Yes	81	(61%)	31	(50%)	97	(38%)
No	52	(39%)	31	(50%)	158	(62%)
RANK OF PARTNER						
Officer	27	(20%)	9	(14%)	46	(18%)
Enlisted	106	(80%)	54	(86%)	209	(82%)

* $p < .001$

Table 3

**PROVIDING SUPPORT
&
RECEIVING SUPPORT FROM FAMILY & FRIENDS**

	<u>Disaster Worker SSO</u>	<u>Non-Worker SSO</u>	
	<u>N</u> <u>(%)</u>	<u>N</u> <u>(%)</u>	<u>N</u> <u>(%)</u>
Providing Support ^a	110 (83.3%)	26 (42.6%)	67 (63.2%)
Receiving Support from Family ^b	98 (83.1%)	34 (73.9%)	87 (59.6%)
Receiving Support from Friends ^c	86 (77.4%)	25 (59.5%)	68 (48.9%)

^a $\chi^2 = 33.37(4)$, $p < .001$; ^b $\chi^2 = 28.70(4)$, $p < .001$; ^c $\chi^2 = 23.95(4)$, $p < .001$

Table 4

SUPPORT PROVISION & ACUTE STRESS (IES)

Disaster Worker SSO

	<u>Support Provision</u>	
	<u>Yes</u>	<u>No</u>
Total IES*	27.0	18.8
Intrusion*	15.7	10.1
Avoidance	11.4	8.7

* $p < .05$

Table 5

**Suggested Mechanisms of Transmission of Posttraumatic Stress
in SSOs of Disaster Workers**

1. Fear and anticipated loss secondary to partner's trauma exposure
2. The demands of providing support itself
3. Non-reciprocal support
4. Recall of ones own past traumatic events
5. Limited attention to ones own needs for:
 - a) *Social support/social networks*
 - b) *Health care utilization*
6. Poor health behaviors
7. Identification with partner's distress
8. Repressed feelings of dissatisfaction or anger at partner
9. Experiencing the distress of others in the community

Chapter 5

An Epidemiological Study of Stress & Health in Enlisted Men & Women

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INTRODUCTION

There has been a fivefold increase in the number of women serving in the U.S. military since 1973 (Hoiberg & White, 1992). At present women comprise approximately 12% of the US Armed Forces. Yet, relatively little is known about how the health of military women may be affected by the stressors of trauma and war, or by the special demands of serving in a unique military environment during peacetime.

Gender mediates the effects of stress on health in several ways: biological, psychological, and cognitive (e.g., perception, interpretation and attribution). Research on stress and gender indicate that women are more likely than men to be depressed, described phobias and panic attacks (Baum & Grunberg, 1991). Women are more willing to report distress than men although illness and physiologic responses may be parallel to males. It has often been assumed that women experience less stress at work than men although data are scant on this issue. Women are more likely to visit physicians and seek health care so that many of the differences in base rates of illness may be a result of this factor. There is a greater risk for posttraumatic stress in single parents with children and higher rates of somatization among women in general. In addition, women generally report greater social supports than men. Smoking and alcohol use are examples of coping strategies that have traditionally been used more frequently by men. As increasing numbers of women adopt similar maladaptive coping strategies, the effects of stress on health may also change in women.

In studies of military populations, comparison between health care utilization rates of men and women demonstrate the same trend as in the civilian world: women have higher overall rates than men although differences in rates have gradually decreased (Hoiberg). Historically, during the rapid integration of women in the 1970's, women's hospitalization rates for stress-related disorders were significantly higher than men's. As women have become more assimilated, this differential is less prominent (Hoiberg & White, 1992.)

This report examines peacetime stressors, reports of well-being and health care utilization endorsed by men and women junior enlisted soldiers and non-commissioned officers (NCOs.) The study examines the relationship between stressors, psychological well-being and physical health.

METHODOLOGY

The data are from surveys administered to two different divisions. One survey was conducted in late August and early October 1987 of four battalions assigned to a light infantry unit in support functions (Rothberg, Harrison & Fullerton, 1989.) A second survey was conducted of combat service support units assigned to a mechanized infantry division in May 1988 and included six battalions (Rothberg, Harrison & Fullerton, 1989.)

The survey was administered to company or battalion groups. It took respondents approximately 45 minutes to complete the questionnaire. Generally, questions were phrased in a manner which allowed the soldier to select the single most appropriate response from a small number of alternatives. The survey covered a broad array of issues ranging from satisfaction with leadership and the work environment to availability and use of social supports. For the purpose of this study, data analyses focused on comparing the responses of enlisted men and women.

Data originally collected included a total of 2430 respondents. For our analyses, the following groups were deleted; all officers ($n=135$), those for whom sex was not known ($n=63$), and those for whom rank was not known ($n=09$). This resulted in a database containing 2223 junior and senior enlisted personnel from both the light and mechanized infantry support divisions.

Variables examined in this study included those examining stressors, perceptions of stressors, the impact of parenting, and 2 standardized measures, General Well-Being and General Health Questionnaire.

GENERAL WELL-BEING (GWB)

The 18-item version of the General Well-Being (GWB) schedule was used in this study. The GWB is a self-report instrument designed to assess individuals' perception of well-being and distress. An overall total scale score is calculated as well as scores for six subscales which measure health worry, energy level, mood (depressed versus cheerful), emotional-behavioral control, relaxation versus tension/anxiety and perception of life as satisfying/interesting. Questions and response options explore the presence, severity, or frequency of symptoms that are clinically important in assessing a patient's sense of well-being or distress.

THE GENERAL HEALTH QUESTIONNAIRE (GHQ)

The 60-item version of the General Health Questionnaire was used in this study. In the GHQ, respondents are asked to rate themselves on variety of symptoms using a severity scale consisting of 4 responses: "better than usual"; "same as usual"; "worse than usual"; and "much worse than usual". Two scoring methods are commonly used. One is a likert score in which each response is given its own value; the other is a binary scoring method in which "better" and "same" as usual are scored as 0 and "worse" and "much worse" than usual are scored as 1. For both methods a total score is calculated by adding up the responses to the sixty items. In scoring the 60-item GHQ, endorsement of any 12 symptoms from the set of 60 symptoms identifies the respondent as being a probable psychiatric case (Goldberg & Hillier, 1979.) The GHQ has generally been used to detect psychiatric disorders in patients seeking medical care; its use as a screening measure has been reported in numerous populations of medical patients. (Viewig, & Hedlund, 1983).

RESULTS

Data were analyzed comparing all enlisted women against all enlisted men; senior enlisted men against senior enlisted women; and junior enlisted men against junior enlisted women and, on selected items, single versus dual-parenting soldiers. The data will be presented by looking at the enlisted group as a whole and then by examining gender similarities and differences.

TOTAL SAMPLE

Demographics: (see table 1, page 16)

In looking at the sample as a whole, there were 1820 enlisted men and 403 enlisted women. The soldiers' *race* was predominantly Caucasian, with 58.9% describing themselves as white, 27.7% as black, and 13.4% as other racial/ethnic background. The majority of soldiers had a *high school* diploma or less (67.19%) with 28.55% having attended some college and 4.25% having graduated from college. The average age for the total sample was 25.6 years (*s.d.* 6.06). Over half (52.8%) the sample was *married*. Eight hundred and seventy-one (871) persons reported having *children*, approximately half of parents(55.9%) having 2 or more children. Ninety-four soldiers (*n*=94) described themselves as *single parents*.

Stressors

In examining the work-related stressors experienced by these soldiers, several relatively objective variables were selected: the number of hours worked on a daily basis, the number of weekends worked per month, how often they arrived home at the anticipated time, whether or not they would prefer a different work schedule, the amount of "down time" spent in the field and in garrison, and whether or not they held a supervisory position.

The vast majority of soldiers reported long *work days*: only 15% ($n=329$) endorsed working an 8 hour day. Seventy-one percent (71%) ($n=1546$) reported working an average of 9-12 hours per day and additional 14% ($n=312$) reported working 13 or more hours daily. Similarly, most soldiers worked at least one *weekend per month*. Less than one-third (30.9%; $n=672$;) endorsed rarely or never working on the weekend. Half (50%; $n=1098$) reported working one weekend a month and 19% ($n=407$) worked 2 or more weekends per month. The majority of soldiers held non-*supervisory positions* (62.8%, $n=1360$).

The *predictability of work schedules* was examined by asking the soldiers how often they arrived home at the time they had anticipated. Roughly 40% ($n=880$) endorsed never or seldom reaching home when they expected to. Conversely, 31% (686) reported usually arriving home on time.

Typically, one of the major stressors during peacetime is boredom. Issues of boredom were explored by examining "down time" - time spent not actively engaged in a work pursuit- both in the field and while in garrison. Thirty-five percent (35%) ($n=738$) reported that they experienced virtually no *downtime while serving in the field*. One-fifth (20%, $n=429$) stated that they spent over half their time in the field waiting for assignments. In garrison, 18% ($n=375$) reported spending one half or more of their workdays in "downtime", while 40% ($n=851$) endorsed virtually no downtime.

In addition to soldiers' self-reports about the nature of their workday, their perceptions of the work stress was also explored by asking them whether they would prefer a different work schedule and asking them to assess the amount of work they had, and their personal morale, the morale in their unit.

Soldiers were evenly divided on whether or not *they would prefer a different work schedule* ($n=1101$, 50% preferring a change; $n=1080$, 49.5% preferring their current schedule. In terms of their perception of the *amount of work* they had, half (50.37%, $n=1100$) felt that the amount of work was about right, while 31.7% ($n=693$) felt they had too much work, and the minority (17.9%, $n=391$) felt they weren't busy enough.

Unit morale was described as very low or low by over half the respondents (54.8%, $n=1186$), 37% ($n=798$) assessed unit morale as moderate, and 8.4% ($n=28$) reported the morale as high or very high. **Personal morale**, on the other hand, was higher with only one quarter (27.4%, $n=601$) describing their morale as low or very low, 39.7% ($n=871$) endorsing moderate morale, and almost a third (32.9%, $n=722$) claiming high or very high personal morale.

Outcome variables

Several variables were chosen as indicators representing psychological and physiological responses to stress: missing work, taking medications for psychological problems, frequency of doctor visits and whether or not the soldier had seen a chaplain or counselor for personal problems since arriving on post..

Eight-nine percent (89%, $n=1973$) of all soldiers reported that they never or rarely **missed work due to psychological problems**, while 11% ($n=235$) endorsed missing work for this reason sometimes or more frequently. Similar percentages reported the **use of psychotropic medications** (90%, $n=1990$ not taking medication for psychological problems; 10% endorsing the use of medications.)

Twelve percent (12%, $n=266$) of all enlisted soldiers endorsed that they had made **frequent visits to a physician within the past year**, while 88% ($n=1947$) reported infrequent or no medical appointments aside from routine physical examinations.

When asked if they **had seen a chaplain or counselor for psychological problems** since arriving on post, 18% ($n=397$) indicated they had sought assistance and 82% ($n=1801$) denied having sought help.

General Health Questionnaire (GHQ)

Mean scores on the GHQ using the likert scoring method were: all enlisted $mean = 48.88$ ($s.d.=26.52$), enlisted men $mean = 48.08$ ($s.d. = 26.51$), and enlisted women $mean = 52.38$ ($s.d. = 26.28$.) Mean scores on the GHQ scored in the binary fashion were as follows: all enlisted ($mean = 9.88$, $s.d.= 12.24$), enlisted men ($mean = 9.45$, $s.d. = 12.16$), and enlisted women ($mean = 11.76$, $s.d. = 12.42$.)

Using **conventional norms on the GHQ**, 973 men (53% of all men) and 247 women (61% of all women) met caseness criteria using likert scoring. Using the binary scoring method, 888 men (49% of all men) and 250 women (62% of all women) were cases when scored conventionally.

Because our other indicators of impairment were endorsed at a much lower level, **customized norms** were developed for this population using a cut-off of 2 standard deviations from the group's mean (see pages 60 and 61 for distribution of scores and statistical information.). Using this scoring methodology, 67 men (4% of all men) and 18 women (4% of all women) were cases using likert scoring; 99 men (5% of all men) and 24 women (6% of all women) were outliers using the binary method of scoring the scale.

General Well-Being (GWB)

The mean total score for General Well-Being for all soldiers was 63.3 (*s.d.* = 19.7), for enlisted men (*mean* = 63.98, *s.d.* = 19.80), and for enlisted women (*mean* = 60.05, *s.d.* = 19.10.) Mean scores and standard deviations for the subscales were as follows:

worry: 9.5 (*s.d.* = 4.0)
energy: 9.8 (*s.d.* = 4.3)
satisfaction: 4.6 (*s.d.* = 2.3)
cheerfulness: 14.8 (*s.d.* = 5.2)
tension: 14.0 (*s.d.* = 5.7)
emotional control: 10.6 (*s.d.* = 3.6)

GENDER COMPARISONS

Demographics

The average age of the men was 25.9 years (*s.d.* = 6.30) and, for women, the average age was 24.4 (*s.d.* = 4.69.) Significant gender differences between all men and all women were noted in **education levels**, **race**, **marital status**, and **place of residence**. With the exception of education (for which there was not a statistically significant difference between senior men and senior women), these differences were also observed in comparisons of senior enlisted men with senior enlisted women and with junior enlisted men vs. junior enlisted women. Enlisted women were more likely to be better educated, black, unmarried, and living off-post. (see results tables.) One hundred and eighteen (118) women reported **having children**, 36 of them describing themselves as **single parents**. Seven hundred and fifty (750) men were actively involved in rearing children, 58 of them as single parents.

Stressors (see Table 4 beginning on page 19 for actual chi-square and t-test results)

In comparing all men with all women, there was a statistically significant difference in supervisory responsibilities (with women less likely to be a supervisor) and in the number of *weekends worked per month* (men more likely to work on weekends); however, this apparent gender difference disappeared when the samples were compared based on seniority. There were no statistically significant differences in comparing all men with all women on *arriving home on time*, or *the amount of down time spent in garrison*. Significant differences were seen in *number of hours worked daily* (women less likely to report working 13 or more hours per day), preferring a *different work schedule* (women more likely to endorse wanting a different schedule) and *downtime in the field* (men more likely to report a lot of down time and more women for whom the questions did not apply.) When comparing senior men against senior women and junior men against junior women, however, some of these differences were no longer found. There was not a difference between senior men and senior women in the *amount of downtime spent in the field*, although this finding held true for junior men compared with junior women. Similarly, *hours worked* (men more likely to work longer hours), did not differ significantly between senior men and women, but did vary between junior men and women.

There was not a significant difference in male versus female soldiers' perception of the *appropriateness of the amount of work* they were given. Significant differences were noted in the *desire to get out of the Army* (more men than women leaning towards staying in or undecided) and in *unit* and *personal morale* (women more likely to report poorer morale.) With the exception of *wanting to leave the Army* (which did not differ significantly between senior men and senior women), these variables continued to be statistically significant in comparing men and women with their senior or junior peers.

Outcome variables

There were no significant differences in *caseness on the GHQ*, *work missed due to psychological problems* or the *use of medication for psychiatric conditions*. Significant differences were seen in *health care utilization* with women more likely to have endorsed seeing a physician within the past month. There was also a significant difference in self-report on *general well-being* with men generally reporting a higher sense of well-being than women; much of this difference appears to have been contributed by gender differences between junior enlisted personnel as there was not a significant difference in well-being between senior men and senior women. There were significant gender differences reported on 4 of the 6 *GWB subscales*: women more likely to be worried, have lower energy, be more anxious and less cheerful. There were no differences in emotionality or satisfaction between all men and all women.

In comparing men and women based on similar rank, some differences were noted. Junior women were more likely to be tense and worried than junior men, but this difference disappeared in comparing senior men and women. Conversely, there were significant differences in cheerfulness reported between senior men and women (men more likely to endorse being cheerful), but this difference did not hold true for junior enlisted men compared with junior enlisted women.

RELATION BETWEEN GHQ AND GWB SCALES

There was a robust negative correlation between caseness on the **GHQ** (using a 2 standard deviation cut-off based on this population's mean scores) and **total score on the General Well-Being** scale. For women the correlation between total well being and the binary scored GHQ was -0.6796 ($p=0.0001$) and for the likert scored GHQ the correlation was -0.8082 ($p=0.001$); For men, the correlation was somewhat weaker (binary GHQ $R=-0.6196$, $p=0.0001$; likert GHQ $R=-0.75441$).

IMPACT OF SINGLE PARENTING

In this sample, there were a total of 58 male **single parents** (23 junior enlisted and 35 senior enlisted men) and a total of 688 enlisted men reporting a dual-parent child-rearing situation (256 junior enlisted and 432 senior enlisted men). For women, there were 36 **single parents** (21 junior enlisted women and 15 senior enlisted men) and 82 dual-parenting enlisted women (50 junior enlisted women and 32 senior enlisted women.) The analysis focusing on the impact of being a single parents upon men and women enlisted soldiers was somewhat constrained statistically by the low numbers of single parents.

In comparing all single parents against dual-parent couples, there were significant differences for **race** (single parents more likely to be black $\chi^2=6.673$, $p=0.036$, $df=2$, 856), taking **psychotropic medications** (single parents more likely to be on medication $\chi^2 4.959$, $p=0.026$, $df=1$, 859) and **wanting to get out of the Army** (single parents reporting higher intent to leave, $\chi^2=10.521$, $p=0.033$, $df=4$, 854). There were not statistically differences between dual-parent soldiers and single soldiers in **missing work due to psychological problems**, **missing work due to children's illness**, **frequent visits to a physician**, having talked with a **chaplain or counselor**, nor in **personal and unit morale** levels. In focusing on the outcome variables of customized **caseness on the GHQ**, there were no apparent differences between the groups using either the binary or likert scoring methods. However, there was a statistically significant difference in **GWB total score** with single parents more likely to report lower well-being (single parents $mean = 59.1912$ $sd=21.98$) vs. dual-parent soldiers $mean = 65.43$; $sd 20.37$, $t=2.75$, $p=0.0061$).

In comparing male and female single parents, there were no significant differences in *race, missing work due to psychological problems, taking medications for psychological problems, seeing a counselor or chaplain since arriving on post, desire to get out of the Army, GWB total scores, or caseness on the GHQ*. There were significant differences in single mothers being more likely to have reported *seeing a physician within the past year* ($\chi^2 = 8.019, p=0.005, df=1, 92$) and having *lower personal morale* ($\chi^2=9.984, p=0.041, df=4, 89$).

DISCUSSION

This analysis explored some of the stressors hypothesized to affect military men and women as well as how these stressors might relate to job satisfaction, psychological well-being and physical health. The study also demonstrates some of the challenges in studying military populations with norms derived from other populations and in examining gender similarities and differences.

Stressors

In this group of soldiers, both men and women described similar stressors. These soldiers had long duty day and often worked on weekends. For many, the predictability of work was low, 40% endorsing that they rarely or never get home at the time they had anticipated. Boredom did not seem to be a major stressor for most soldiers, at least as reflected in their perception of "down time" (roughly one fifth endorsing virtually no downtime in the field or in garrison.) The soldiers' perceptions of their work situation revealed that they were evenly split on whether or not they'd prefer a different work schedule (50% reporting they wanted to change and 50% wanting to keep it the same.)

Gender Differences

Reasons hypothesized to account for gender differences between men and women's experience of stressors include high distress around work/home conflicts, differences in values, difficulties in integrating into a traditionally male work environment, and a greater willingness to report feelings of being stressed and psychological and physical symptoms (Schlenger and Jordan, 1996).

In this study, the gender differences found in the number of hours worked daily, number of weekends worked, preference for a different work schedule and downtime in the field may be the result of different women holding different occupational specialties than their male counterparts. Our findings replicate that of other studies in finding that women are larger consumers of health care; future studies with larger samples should explore the variables contributing to these differences. Moreover, as the number of fields open to women expand and the percentage of women in the military grow, it may be possible to obtain larger sample sizes allowing for better clarification of factors which may contribute differentially to women's perception and experience of stressors as well

as physical and mental health outcomes. These gender differences also hold implication for prevention and intervention strategies, for example outreach efforts and mobilization of social supports can be most effectively targeted if one understands differences between the issues of a married male soldier with family members and a young female soldiers living in the barracks.

Single vs Dual-parenting Soldiers

This study did not show significant differences in the stressors examined between single-parenting and dual-parenting soldiers. However, it seems probable that there are other stressors or confounding variables which result in the significant finding that single soldiers are more likely to take psychotropic medications and to want to get out of the Army than are their married compatriots with children. It is interesting to note, also, that there are some differences between male and female single parents, women being more likely to report seeing a physician and having lower morale. Similarly, single parents as a whole reported lower levels of well-being than did dual-parent soldiers. The negative findings in comparing single parent versus dual parent soldiers are also of importance: single parents were no more likely to be cases on the GHQ or to miss work or seek counseling.

Methodological Challenges

There are no other studies which provide GHQ and GWB results (see pages 62 - 71) on such a large population in a way which would allow other investigators to establish norms for military populations. Our findings strongly suggest that norms derived from civilian populations cannot be assumed to generalize well to military populations. For example, if standard cut-offs were used for the General Health Questionnaire, 53% of all enlisted men and 62% of all women would have met caseness criteria. Since this sample was chosen from a non-patient population in which all the individuals were at their workplace, it does not seem plausible that all these individuals are distressed to such an extent that they would meet diagnostic criteria for psychiatric disorders. The hypothesis that conventional norms may not be of great assistance is borne out by the fact that these soldiers' psychological states do not appear to affect function to a great degree with only 11% of the sample endorsing that they sometimes or often miss work due to psychological problems and only 10% reporting the use of psychotropic medication. Further studies, then, should continue to examine the question of what norms should be established to assist military leaders and health care practitioners identify soldiers in need of psychiatric assessment.

An important confounding variable that needs to be considered in examining military populations is that junior and senior enlisted personnel may have different stressors and one must be mindful that self (and system) selection takes place for those making it into the senior ranks.

In the examination of gender-related variables in military populations, our findings of significant differences in demographic variables of education level, race, marital status, and place of residence present potential confounding variables which make interpreting and generalizing the data more difficult/limited. Future studies must keep these important differences in mind when developing sampling strategies and in formulating questions on stressors.

Impairment cuts across a number of work domains: attitudes, morale, wanting to get out of the Army, and self-reports of performance. Further exploration of the similarities and differences between men and women soldiers' perception of stressors, controlling for demographic and occupational differences, would be of enormous assistance in preparing both men and women for the unique stressors of military service. This is especially important since a number of trends (the changing nature of military missions, the increase of single parent and dual-military career families and increasing specialty opportunities for women) make it difficult to generalize from past data. However, more intensive examination of older datasets may lead to the generation of valuable hypotheses for examination in today's military.

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TABLE 1

<u>ALL ENLISTED</u> (n=2,223)	<u>WOMEN</u> (n=403)		<u>MEN</u> (n=1,820)	
	<u>SR. ENL</u> (n=92)	<u>JR ENL</u> (n=311)	<u>SR. ENL</u> (n=695)	<u>JR ENL</u> (n=1,125)
RACE				
White n=1,301 (58.9%)	n=37 (40.2%)	n=167 (53.7%)	n=380 (55.4%)	n=716 (64.1%)
Black n=611 (27.7%)	n=39 (42.4%)	n=113 (36.3%)	n=181 (26.4%)	n=277 (24.8%)
Other n=297 (13.4%)	n=16 (17.4%)	n=31 (10.1%)	n=125 (18.2%)	n=34 (3.0%)
EDUCATION				
=<High school n=1485 (67.2%)	n=42 (46.2%)	n=196 (63.4%)	n=387 (56.0%)	n=860 (77.0%)
Some college n=631 (28.6%)	n=41 (45.1%)	n=104 (33.7%)	n=261 (37.8%)	n=223 (20.0%)
=>College grad n=94 (4.25%)	n=8 (8.8%)	n=9 (2.9%)	n=43 (6.2%)	n=34 (3.0%)
MARITAL STATUS				
Married n=1169 (52.8%)	n=50 (54.3%)	n=124 (52.8%)	n=529 (76.8%)	n=464 (41.4%)
Single n=1043 (47.2%)	n=42 (45.7%)	n=184 (59.7%)	n=160 (23.2%)	n=1043 (47.2%)
CHILDREN				
Children n=871 (39.18%)	n=47 (51.1%)	n=72 (23.2%)	n=469 (67.5%)	n=281 (15.4%)
Single parent n=94 (10.9%)	n=15 (31.9%)	n=21 (29.6%)	n=35 (7.5%)	n=23 (8.2%)

TABLE 2

OVERVIEW OF VARIABLES' SIGNIFICANCE - ORD/CARSON
(probability values from chi-square and t-tests; see Table 3 for entire results)

VARIABLE	ALL MEN vs ALL WOMEN	SENIOR MEN vs SENIOR WOMEN	JUNIOR MEN vs JUNIOR WOMEN
EDUCATION	0.001	0.188	0.000
RACE	0.000	0.004	0.000
MARITAL STATUS	0.000	0.000	0.002
RESIDENCE	0.000	0.003	0.002
SUPERVISOR	0.000	0.073	0.274
HOURS WORKED	0.017	0.598	0.008
WEEKENDS WORKED	0.031	0.172	0.273
ARRIVE HOME ON TIME	0.704	0.074	0.285
PREFER DIFFER. SCHEDULE	0.029	0.009	0.290
DOWN TIME -FIELD	0.001	0.5337	0.002
DOWN TIME -GARRISON	0.982	0.754	0.692
AMOUNT OF WORK	0.264	0.851	0.338
WISH TO GET OUT OF ARMY	0.037	0.070	0.005
UNIT MORALE	0.000	0.000	0.004
PERSONAL MORALE	0.000	0.000	0.151
SEEN CHAPLAIN/COUNSELOR	0.017	0.041	0.615
CASENESS ON GHQ - LIKERT	0.532	0.071	0.669
CASENESS ON GHQ - BINARY	0.787	0.359	0.622
MISSED WORK DUE TO PSYCH	0.510	0.818	0.172
MISSED WORK LOTS DUE TO P	0.071	0.408	0.053
TAKE MEDS FOR PSY COND	0.396	0.420	0.136
TAKE LOTS MEDS FOR PSY	0.243	0.861	0.197
SEEN M.D. IN PAST MONTH	0.000	0.006	0.000

TABLE 2 (cont.)

OVERVIEW OF VARIABLES' SIGNIFICANCE - ORD/CARSON
(probability values from chi-square and t-tests; see Table 3 for entire results)

VARIABLE	ALL MEN vs ALL WOMEN	SENIOR MEN vs SENIOR WOMEN	JUNIOR MEN vs JUNIOR WOMEN
GHQ LIKERT 1S.D.	0.0039	0.0687	0.1371
GHQ BINARY 1SD	0.0008	0.0310	0.0775
GWB - 2 MISSING ALLOWED	0.0003	0.0529	0.0264
GWB - 0 MISSING ALLOWED	0.0012	0.1512	0.0332
GWB - WORRY SUBSCALE	0.0260	0.8340	0.0125
GWB - ENERGY SUBSCALE	0.0001	0.0018	0.0343
GWB - SATISFACTION SUB	0.9089	0.1468	0.0821
GWB - CHEERFULNESS SUB	0.0039	0.0129	0.2624
GWB - TENSION SUBSCALE	0.0000	0.1607	0.0004
GWB - EMOTIONALITY SUB	0.2091	0.9141	0.5495

TABLE 3 - RESULTS OF BIVARIATE ANALYSIS

ALL ENLISTED WOMEN VS MEN

EDUCATION (using row %)

N Tot=2210	N	1=all men	2=all women	DF	Chi-Square	P-value
OCEDUC				2,2208	14.440	0.001
1	1485	1247 (83.97%)	238 (16.03%)			
2	631	486 (77.02%)	145 (22.98%)			
3	94	77 (81.91%)	17 (18.09%)			
	2210	1810				

OCEDUC : 1=hs or less, 2=some college, 3=college/college +
1=men 2=women

RACE (using row %)

N Tot=2208	N	1=all men	2=all women	DF	Chi-Square	P-value
OCRACE				2,2206	24.859	0.000
1	1301	1097 (84.32%)	204 (15.68%)			
2	611	459 (75.12%)	152 (24.88%)			
3	296	249 (84.12%)	47 (15.88%)			
	2208	1805	403			

OCRACE: 1=white, 2=black, 3=other
1=men 2=women

MARITAL STATUS (using row %)

N Tot=2212	N	1=all men	2=all women	DF	Chi-Square	P-value
MARSTAT				5,2207	35.652	0.000
1	7990	630 (79.75%)	160 (20.25%)			
2	123	97 (78.86%)	26 (21.14%)			
3	127	90 (70.87%)	37 (29.13%)			
4	3	0 (0%)	3 (100.00%)			
5	199	167 (83.92%)	32 (16.08%)			
6	970	828 (85.36%)	142 (14.64%)			
	2212	18112	400			

MARSTAT : 1=nvr mar, 2=div, 3=sep, 4=wid, 5=remarried, 6=1st marriage
1=men 2=women

CONDENSED MARITAL STATUS (using row %)

N Tot=2212	N	1=all men	2=all women	DF	Chi-Square	P-value
OCMARRIG				2,2210	21.527	0.000
0	790	630 (79.75%)	160 (20.25%)			
1	253	187 (73.91%)	66 (26.09%)			
2	1169	995 (85.12%)	174 (14.88%)			
	2212	1812				

OCMARRIG: 0=nvr marr 1=if loss, 2=if married
1=men 2=women

LOCATION (using row %)

N Tot=2223	N	1=all men	2=all women	DF	Chi-Square	P-value
OCLOCAT				1,2222	1.665	0.197
0	666	556 (83.48%)	110 (16.52%)			
1	1557	1264 (81.18%)	293 (18.82%)			
	2223	1820	403			

OCLOCAT: 0=Ft. Ord 1=Ft. Carson

1=men 2=women

RESIDENCE (using row %)

N Tot=2181	N	1=all men	2=all women	DF	Chi-Square	P-value
RESIDE				2,2179	26.077	0.000
1	811	655 (80.76%)	156 (19.24%)			
2	305	281 (92.13%)	24 (7.87%)			
3	1065	847 (79.53%)	218 (20.47%)			
	2181	1783	398			

RESIDE: 1=barracks, 2=on-post, 3=off-post

1=men 2=women

SUPERVISORY STATUS (using row %)

N Tot=2164	N	1=all men	2=all women	DF	Chi-Square	P-value
SUPRVISR				1,2163	14.498	0.000
1	1360	1082 (79.56%)	278 (20.44%)			
2	804	692 (86.07%)	112 (13.93%)			
	2164	1774	390			

SUPRVISR: 0=non-supervisor, 1=supervisor

1=men 2=women

OF HOURS WORKED/DAY (using row %)

N Tot=2187	N	1=all men	2=all women	DF	Chi-Square	P-value
OCWKHRS				3,2184	10.143	0.017
1	329	276 (83.89%)	53 (16.11%)			
2	1546	1238 (80.08%)	308 (19.92%)			
3	242	210 (86.78%)	32 (13.22%)			
4	70	62 (88.57%)	8 (11.43%)			
	2187	1786	401			

OCWKHRS : 1=1-8 hours/day, 2=9-12 hours/day, 3=13-15 hours/day, 4=16+hours/day

1=men 2=women

OF WEEKENDS WORKED/MONTH (using row %)

N Tot=2177	N	1=all men	2=all women	DF	Chi-Square	P-value
OCWKENDS				3,2174	8.863	0.031
1	672	533 (79.32%)	139 (20.68%)			
2	1098	926 (84.34%)	172 (15.66%)			
3	299	237 (79.26%)	62 (20.74%)			
4	108	89 (82.41%)	19 (17.59%)			
	2177	1785	392			

OCWKENDS : 1=1-8, 2=9-12, 3=13-15, 4=16+

SEX: 1=JR ENL 2=SR ENL

HOME ON TIME (using row %)

N Tot=2217	N	1=all men	2=all women	DF	Chi-Square	P-value
HOMEOT				3,2214	1.406	0.704
1	303	241 (79.54%)	62 (20.46%)			
2	577	471 (81.63%)	106 (28.37%)			
3	651	537 (82.49%)	114 (17.51%)			
4	686	565 (82.36%)	121 (17.64%)			
	2217	1814	403			

1=never, 2=seldom, 3=sometimes, 4=most of the time

1=men 2=women

WOULD PREFER DIFFERENT SCHEDULE (using row %)

N Tot=2181	N	1=all men	2=all women	DF	Chi-Square	P-value
DIFSCHE				1,2180	4.798	0.029
1	1101	884 (80.29%)	217 (19.71%)			
2	1080	906 (83.89%)	174 (16.11%)			
	2181	1790	391			

DIFSCHE: 1= would prefer diff sched 2=current sched okay

1=men 2=women

DOWN TIME IN THE FIELD (using row %)

N Tot=2134	N	1=all men	2=all women	DF	Chi-Square	P-value
DTFLD				5,2129	20.949	0.001
1	186	151 (81.18%)	35 (18.82%)			
2	243	208 (85.60%)	35 (14.40%)			
3	290	244 (84.14%)	46 (15.86%)			
4	414	359 (86.71%)	55 (13.29%)			
5	738	598 (81.03%)	140 (18.97%)			
6	263	195 (74.14%)	68 (25.86%)			
	2134	1755	379			

DTFLD : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=

1=men 2=women

DOWN TIME IN GARRISON (using row %)

N Tot=2108	N	1=all men	2=all women	DF	Chi-Square	P-value
DTGAR				4,2104	0.407	0.982
1	163	134 (82.21%)	29 (17.79%)			
2	212	172 (81.13%)	40 (18.87%)			
3	397	330 (83.12%)	67 (16.88%)			
4	485	401 (82.68%)	84 (17.32%)			
5	851	703 (82.61%)	148 (17.39%)			
	2108	1740				

DTGAR : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=

1=men 2=women

AMOUNT OF WORK (using row %)

N Tot=2184	N	1=all men	2=all women	DF	Chi-Square	P-value
AMTWRK				2,2182	2.661	0.264
1	693	578 (83.41%)	115 (16.59%)			
2	1100	886 (80.55%)	214 (19.45%)			
3	391	324 (82.86%)	67 (17.14%)			
	2184	1788	396			

AMTWRK: 1=too much, 2=about right, 3=not enough work

1=men 2=women

WOULD LIKE TO GET OUT OF THE ARMY(using row %)

N Tot=2207	N	1=all men	2=all women	DF	Chi-Square	P-value
GETOUT				4, 2203	10.187	0.037
1	407	340 (83.54%)	67 (16.46%)			
2	396	3320 (80.81%)	76(19.19%)			
3	433	365 (84.30%)	68 (15.70%)			
4	332	253 (76.20%)	79 (23.80%)			
5	639	528 (82.63%)	111 (17.37%)			
	2207	1806	401			

GETOUT : 1=definitely not, 2=probably not, 3=not sure, 4=probably get out, 5=definitely get out

SEX: 1=JR ENL 2=SR ENL

PERSONAL MORALE (using row %)

N Tot=2194	N	1=all men	2=all women	DF	Chi-Square	P-value
PERMOR				4,2190	24.983	0.000
1	234	171 (73.08%)	63 (26.92%)			
2	367	283 (77.11%)	84 (22.89%)			
3	871	730 (83.81%)	141 (16.19%)			
4	545	464 (85.14%)	81 (14.86%)			
5	177	150 (84.75%)	27 (15.25%)			
	2194	1798	396			

PERMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high

1=men 2=women

UNIT MORALE (using row %)

N Tot=2166	N	1=all men	2=all women	DF	Chi-Square	P-value
UNITMOR				4,2162	36.086	0.000
1	624	463 (74.20%)	161 (25.80%)			
2	562	468 (83.27%)	94 (16.73%)			
3	798	686 (85.96%)	112 (14.04%)			
4	154	131 (85.06%)	23 (14.94%)			
5	28	21 (75.00%)	7 (25.00%)			
	2166	1769	397			

UNITMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high (personal morale)

1=men 2=women

HAVE SEEN CHAPLAIN/COUNSELOR (using row %)

N Tot=2198	N	1=all men	2=all women	DF	Chi-Square	P-value
W15A				1,2197	5.660	0.017
1 (yes)	397	308 (77.58%)	89 (22.42%)			
2(no)	1801	1489 (82.68%)	312 (17.32%)			
	2198	1797	401			

W15A: 1=yes 2=no Saw a chaplain or counselor since arriving on post
1=men 2=women

CASENESS ON CUSTOMIZED GHQ [LIKERT] (using row %)

N Tot=2092	N	1=all men	2=all women	DF	Chi-Square	P-value
SLCASALL				1,2091	0.390	0.532
0 (non-case)	2007	1636 (81.51%)	371 (18.49%)			
1 (case)	85	67 (78.82%)	18 (21.21%)			
	2092	1703	389			

SLCASALL 1=caseness on customized 2 sd likert 0=non-case
1=men 2=women

CASENESS ON CUSTOMIZED GHQ [BINARY] (using row %)

N Tot=2092	N	1=all men	2=all women	DF	Chi-Square	P-value
BMCASALL				1,2091	0.073	0.787
0 (non-case)	1969	1604 (81.46%)	365 (18.54%)			
1 (case)	123	99 (80.49%)	24 (19.51%)			
	2092	1703	389			

BMCASALL 1=caseness on customized 1 sd binary 0=non-case
1=men 2=women

MISS WORK DUE TO PSYCHOLOGICAL PROBLEMS
(using row %)

N Tot=2208	N	1=all men	2=all women	DF	Chi-Square	P-value
MISSWORK				1,2207	.434	0.510
0 (non-case)	1973	1611 (81.65%)	362 (18.35%)			
1 (case)	235	196 (83.40%)	39 (16.60%)			
	2208	1807	401			

MISSWORK 1=miss work sometimes-always due to psych prob 0=never/rarely
1=men 2=women

TAKE MEDS FOR PSYCHOLOGIC PROBLEMS
(using row %)

N Tot=2208	N	1=all men	2=all women	DF	Chi-Square	P-value
TAKEMEDS				1,2207	0.722	0.396
0 (no meds)	1990	1624 (82.61%)	366 (18.39%)			
1 (meds)	218	183 (83.94%)	35 (16.06%)			
	2208	1807	401			

TAKEMEDS 1=takes meds for psych prob 0=does not take meds for psych prob
1=men 2=women

OF VISITS TO PHYSICIAN IN PAST YEAR (using row %)

N Tot=2208	N	1=all men	2= female	DF	Chi-Square	P-value
MDFREQNT				1,2207	25.867	0.000
0 (infreq)	1947	1624 (83.41%)	323 (16.59%)			
1 (freq)	261	184 (70.50%)	77 (29.50%)			
	2208	1808	400			

MDFREQNT 1=frequent visits to doctors during past year 2=infreq or no MD visits
1=men 2=women

HOW OFTEN DISCUSSES PERSONAL PROBLEMS WITH
FAMILY MEMBERS (using row %)

N Tot=2204	N	1=all men	2=female	DF	Chi-Square	P-value
W22				4, 2198	5.263	0.261
1	307	253 (82.41%)	54 (17.59%)			
2	404	341 (84.41%)	63 (15.59%)			
3	505	416 (82.38%)	89 (17.62%)			
4	536	438 (81.72%)	98 (18.28%)			
5	452	355 (78.54%)	97 (21.46%)			
	2204	1803	401			

W22: 1=nvr, 2=rarely, 3=sometimes, 4=often, 5=always talk with friends about problems
1=men 2=women

HOW OFTEN DISCUSSES PERSONAL PROBLEMS
WITH FRIENDS (using row %)

N Tot=2197	N	1=all men	2=female	DF	Chi-Square	P-value
W27				5,2192	48.713	0.000
1	325	288 (88.62%)	37 (11.38%)			
2	641	539 (84.09%)	102 (15.91%)			
3	742	603 (81.27%)	139 (18.73%)			
4	274	207 (75.55%)	67 (24.45%)			
5	107	68 (63.55%)	39 (36.45%)			
6	108	97 (89.81%)	11 (10.19*%)			
	2197	1802	395			

W27: 1=nvr, 2=rarely, 3=sometimes, 4=often, 5=always, 6=N/A talk with family about problems
1=men 2=women

UNIT MORALE (using row %)

N Tot=2166	N	1=all men	2=female	DF	Chi-Square	P-value
UNITMOR				4,2162	36.086	0.000
1	624	463 (74.20%)	161 (25.80%)			
2	562	468 (83.27%)	94 (16.73%)			
3	798	686 (85.96%)	112 (14.04%)			
4	154	131 (85.06%)	23 (14.94%)			
5	28	21 (75.00%)	7 (25.00%)			
	2166	1769	397			

UNITMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high
1=men 2=women

COLUMN%**EDUCATION (using column %)**

N Tot=2210	N	1=all men	2=all women	DF	Chi-Square	P-value
OCEDUC				2,2208	14.440	0.001
1	1485	1247 (68.90%)	238 (59.50%)			
2	631	486 (26.85%)	145 (36.25%)			
3	94	77 (4.25%)	17 (4.25%)			
	2210	1810				

OCEDUC : 1=hs or less, 2=some college, 3=college/college +

1=men 2=women

RACE (using column %)

N Tot=2208	N	1=all men	2=all women	DF	Chi-Square	P-value
OCRACE				2,2206	24.859	0.000
1	1301	1097 (60.78%)	204 (50.62%)			
2	611	459 (25.43%)	152 (37.72%)			
3	296	249(13.80%)	47 (11.66%)			
	2208	1805	403			

OCRACE: 1=white, 2=black, 3=other

1=men 2=women

MARITAL STATUS (using column %)

N Tot=2212	N	1=all men	2=all women	DF	Chi-Square	P-value
MARSTAT				5,2207	35.652	0.000
1	7990	630 (34.77%)	160 (40.00%)			
2	123	97 (5.35%)	26 (6.50%)			
3	127	90 (4.87%)	37 (9.25%)			
4	3	0 (0%)	3 (0.75%)			
5	199	167 (9.22%)	32 (8.00%)			
6	970	828 (45.70%)	142 (35.50%)			
	2212	1812	400			

MARSTAT : 1=nvr mar, 2=div, 3=sep, 4=wid, 5=remarried, 6=1st marriage

1=men 2=women

MARITAL STATUS CONDENSED (using column %)

N Tot=2212	N	1=all men	2=all women	DF	Chi-Square	P-value
OCMARRIG				2,2210	21.527	0.000
0	790	630 (34.77)	160 (40.00%)			
1	253	187 (10.32%)	66 (16.50%)			
2	1169	995 (54.91%)	174 (43.50%)			
	2212	1812				

OCMARRIG: 0=nvr marr 1=if loss, 2=if married

1=men 2=women

LOCATION (using column %)

N Tot=2223	N	1=all men	2=all women	DF	Chi-Square	P-value
OCLOCAT				1,2222	1.665	0.197
0	666	556 (30.55%)	110 (27.30%)			
1	1557	1264 (69.45%)	293 (72.70%)			
	2223	1820	403			

OCLOCAT: 0=Ft. Ord 1=Ft. Carson

1=men 2=women

RESIDENCE (using column %)

N Tot=2181	N	1=all men	2=all women	DF	Chi-Square	P-value
RESIDE				2,2179	26.077	0.000
1	811	655 (36.74%)	156 (39.20%)			
2	305	281 (15.75%)	24 (6.03%)			
3	1065	847 (47.50%)	218 (54.77%)			
	2181	1783	398			

RESIDE: 1=barracks, 2=on-post, 3=off-post

1=men 2=women

SUPERVISOR (using column %)

N Tot=2164	N	1=all men	2=all women	DF	Chi-Square	P-value
SUPRVISR				1,2163	14.498	0.000
1	1360	1082 (60.99%)	278 (71.28%)			
2	804	692 (39.01%)	112 (28.72%)			
	2164	1774	390			

SUPRVISR: 0=non-supervisor, 1=supervisor

1=men 2=women

HOURS WORKED/DAY (using column %)

N Tot=2187	N	1=all men	2=all women	DF	Chi-Square	P-value
OCWKHRS				3,2184	10.143	0.017
1	329	276 (15.45%)	53 (13.22%)			
2	1546	1238 (69.32%)	308 (76.81%)			
3	242	210 (11.76%)	32 (7.98%)			
4	70	62 (3.47%)	8 (2.00%)			
	2187	1786	401			

OCWKHRS : 1=1-8, 2=9-12, 3=13-15, 4=16+

1=men 2=women

WEEKENDS WORKED/MONTH (using column %)

N Tot=2177	N	1=all men	2=all women	DF	Chi-Square	P-value
OCWKENDS				3,2174	8.863	0.031
1	672	533 (29.86%)	139 (35.46%)			
2	1098	926 (51.88%)	172 (43.88%)			
3	299	237 (13.28%)	62 (15.82%)			
4	108	89 (4.99%)	19 (4.85%)			
	2177	1785	392			

OCWKENDS : 1=1-8, 2=9-12, 3=13-15, 4=16+

1=men 2=women

HOME ON TIME (using column %)

N Tot=2217	N	1=all men	2=all women	DF	Chi-Square	P-value
HOMEOT				3,2214	1.406	0.704
1	303	241 (13.29%)	62 (15.38%)			
2	577	471 (25.96%)	106 (26.30%)			
3	651	537 (29.60%)	114 (28.29%)			
4	686	565 (31.15%)	121 (30.02%)			
	2217	1814	403			

1=never, 2=seldom, 3=sometimes, 4=most of the time

1=men 2=women

WOULD PREFER DIFFERENT SCHEDULE (using column %)

N Tot=2181	N	1=all men	2=all women	DF	Chi-Square	P-value
DIFSCHED				1,2180	4.798	0.029
1	1101	884 (49.39%)	217 (55.50%)			
2	1080	906 (50.61%)	174 (44.50%)			
	2181	1790	391			

DIFSCHED: 1= would prefer diff sched 2=current sched okay

1=men 2=women

DOWN TIME IN THE FIELD (using column %)

N Tot=2134	N	1=all men	2=all women	DF	Chi-Square	P-value
DTFLD				5,2129	20.949	0.001
1	186	151 (8.60%)	35 (9.23%)			
2	243	208 (11.85%)	35 (9.23%)			
3	290	244 (13.90%)	46 (12.14%)			
4	414	359 (20.46%)	55 (14.51%)			
5	738	598 (34.07%)	140 (36.94%)			
6	263	195 (11.11%)	68 (17.94%)			
	2134	1755	379			

DTFLD : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=

1=men 2=women

DOWN TIME IN GARRISON (using column %)

N Tot=2108	N	1=all men	2=all women	DF	Chi-Square	P-value
DTGAR				4,2104	0.407	0.982
1	163	134 (7.70%)	29 (7.88%)			
2	212	172 (9.89%)	40 (10.87%)			
3	397	330 (18.97%)	67 (18.21%)			
4	485	401 (23.05%)	84 (22.83%)			
5	851	703 (40.40%)	148 (40.22%)			
	2108	1740	368			

DTGAR : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=

1=men 2=women

AMOUNT OF WORK (using column %)

N Tot=2184	N	1=all men	2=all women	DF	Chi-Square	P-value
AMTWRK				2,2182	2.661	0.264
1	693	578 (32.33%)	115 (29.04%)			
2	1100	886 (49.55%)	214 (54.04%)			
3	391	324 (18.12%)	67 (16.92%)			
	2184	1788	396			

AMTWRK: 1=too much, 2=about right, 3=not enough work
1=men 2=women

WANT TO GET OUT OF THE ARMY (using column %)

N Tot=2207	N	1=male	2=female	DF	Chi-Square	P-value
GETOUT				4, 2203	10.187	0.037
1	407	340 (18.83%)	67 (16.71%)			
2	396	320 (17.72%)	76 (18.95%)			
3	433	365 (20.21%)	68 (16.96%)			
4	332	253 (14.01%)	79 (19.70%)			
5	639	528 (29.24%)	111 (27.68%)			
	2207	1806	401			

GETOUT : 1=definitely not, 2=probably not, 3=not sure, 4=probably get out, 5=definitely get out
1=men 2=women

PERSONAL MORALE (using column %)

N Tot=2194	N	1=male	2=female	DF	Chi-Square	P-value
PERMOR				4,2190	24.983	0.000
1	234	171 (9.51%)	63 (15.91%)			
2	367	283 (15.74%)	84 (21.21%)			
3	871	730 (40.60%)	141 (35.61%)			
4	545	464 (25.81%)	81 (20.45%)			
5	177	150 (8.34%)	27 (15.25%)			
	2194	1798	396			

PERMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high
1=men 2=women

UNIT MORALE (using column %)

N Tot=2166	N	1=male	2=female	DF	Chi-Square	P-value
UNITMOR				4,2162	36.086	0.000
1	624	463 (26.17%)	161 (40.55%)			
2	562	468 (26.46%)	94 (23.68%)			
3	798	686 (38.78%)	112 (28.21%)			
4	154	131 (7.41%)	23 (5.79%)			
5	28	21 (1.19%)	7 (1.76%)			
	2166	1769	397			

UNITMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high
1=men 2=women

HAVE SEEN CHAPLAIN/COUNSELOR (using column %)

N Tot=2198	N	1=male	2=female	DF	Chi-Square	P-value
W15A				1,2197	5.660	0.017
1 (yes)	397	308 (17.14%)	89 (22.19%)			
2(no)	1801	1489 (82.89%)	312 (77.81%)			
	2198	1797	401			

W15A: 1=yes 2=no
1=men 2=women

CASENESS ON CUSTOMIZED GHQ [LIKERT] (using column %)

2092	N	1=male	2=female	DF	Chi-Square	P-value
SLCASALL				1,2091	0.390	0.532
0 (non-case)	2007	1636 (96.07%)	371 (95.37%)			
1 (case)	85	67 (3.93%)	18 (4.63%)			
	2092	1703	389			

SLCASALL 1=caseness on customized 2 sd likert 0=non-case
1=men 2=women

CASENESS ON CUSTOMIZED GHQ [BINARY] (using column %)

N Tot=2092	N	1= male	2= female	DF	Chi-Square	P-value
BMCASALL				1,2091	0.073	0.787
0 (non-case)	1969	1604 (94.19 %)	365 (93.83%)			
1 (case)	123	99 (5.81%)	24 (6.17%)			
	2092	1703	389			

BMCASALL 1=caseness on customized 1 sd binary 0=non-case
1=men 2=women

MISS WORK DUE TO PSYCHOLOGICAL PROBLEMS (using column %)

N Tot=2208	N	1= male	2= female	DF	Chi-Square	P-value
MISSWORK				1,2207	.434	0.510
0 (non-case)	1973	1611 (89.15%)	362 (90.27%)			
1 (case)	235	196 (10.85%)	39 (9.73%)			
	2208	1807	401			

MISSWORK 1=miss work sometimes-always due to psych prob 0=never/rarely
1=men 2=women

TAKE MEDICATIONS FOR PSYCHOLOGICAL PROBLEMS (using column %)

N Tot=2208	N	1= male	2= female	DF	Chi-Square	P-value
TAKEMEDS				1,2207	0.722	0.396
0 (no meds)	1990	1624 (89.87%)	366 (91.27%)			
1 (meds)	218	183 (10.13%)	35 (8.73%)			
	2208	1807	401			

TAKEMEDS 1=takes meds for psych prob 0=does not take meds for psych prob
1=men 2=women

OF VISITS TO PHYSICIAN IN PAST YEAR (using column %)

N Tot=2208	N	1= male	2= female	DF	Chi-Square	P-value
MDFREQNT				1,2207	25.867	0.000
0 (infreq)	1947	1624 (89.82%)	323 (80.75%)			
1 (freq)	261	184 (10.18%)	77 (19.25%)			
	2208	1808	400			

MDFREQNT 1=frequent visits to doctors during past month 2=infreq or no MD visits
1=men 2=women

HOW OFTEN DISCUSS PERSONAL PROBLEMS WITH FAMILY MEMBERS (using column %)

N Tot=2204	N	1=male	2=female	DF	Chi-Square	P-value
w22				4, 2198	5.263	0.261
1	307	253 (14.03%)	54 (13.47%)			
2	404	341 (18.91%)	63 (15.71%)			
3	505	416 (23.07%)	89 (22.19%)			
4	536	438 (24.29%)	98 (24.44%)			
5	452	355 (19.69%)	97 (24.19%)			
	2204	1803	401			

W22: 1=nvr, 2=rarely, 3=sometimes, 4=often, 5=always talk with friends about problems
1=men 2=women

HOW OFTEN DISCUSS PERSONAL PROB WITH FRIENDS (using column %)

N Tot=2197	N	1=male	2=female	DF	Chi-Square	P-value
W27				5,2192	48.713	0.000
1	325	288 (15.98%)	37 (9.37%)			
2	641	539 (29.91%)	102 (25.82%)			
3	742	603 (33.46%)	139 (35.19%)			
4	274	207 (11.49%)	67 (16.96%)			
5	107	68 (3.77%)	39 (9.87%)			
6	108	97 (5.38%)	11 (2.78%)			
	2197	1802	395			

W27: 1=nvr, 2=rarely, 3=sometimes, 4=often, 5=always, 6=N/A talk with family about problems
SEX: 1=male 2=female

UNIT MORALE (using column %)

N Tot=2166	N	1=male	2=female	DF	Chi-Square	P-value
UNITMOR				4,2162	36.086	0.000
1	624	463 (%)	161 (%)			
2	562	468 (%)	94 (%)			
3	798	686 (%)	112 (%)			
4	154	131 (%)	23 (%)			
5	28	21 (%)	7 (%)			
	2166	1769	397			

UNIMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high

SEX: 1=male 2=female

SLGHQ

(total score on likert scored GHQ)

(1=men 2=women)

SLGHQ	N	Mean	S.D.	Variance	T	DF	P-value
1	1703	48.0847	26.5123	Unequal	-2.9022	582.2	0.0038
2	389	52.3773	26.2769	Equal	-2.8859	2090.2	0.0039

F(1702,388) = 1.02, $p = .8360$

BMGHQ

(total score on binary scored GHQ)

(1=men 2=women)

BMGHQ	N	Mean	S.D.	Variance	T	DF	P-value
1	1703	9.4503	12.1613	Unequal	-3.3286	570.5	0.0009
2	389	11.7639	12.4152	Equal	-3.3721	2090.5	0.0008

F(1050,304) = 1.07, $p = .5057$

V8

(total GWB score - 2 missing allowed)

(1=men 2=women)

V8	N	Mean	S.D.	Variance	T	DF	P-value
1	1765	63.9828	19.7978	Unequal	3.6732	596.5	0.0003
2	394	60.0472	19.0994	Equal	3.5904	2157.0	0.0003

F(1764,393) = 1.07, $p = .3753$

V9

(total GWB score - no missing allowed)

(1=men 2=women)

V9	N	Mean	S.D.	Variance	T	DF	P-value
1	1616	64.1572	19.6227	Unequal	3.2898	542.8	0.0011
2	361	60.4792	19.1099	Equal	3.2350	1975.0	0.0012

$F(277,82) = 1.01, p = .9735$

GWBWOR

(GWB subscale score for health worry; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBWOR	N	Mean	S.D.	Variance	T	DF	P-value
1	1701	3.5973	3.9471	Unequal	2.1977	555.1	0.0284
2	381	9.0971	4.0306	Equal	2.2271	2080.0	0.0260

$F(380,1700) = 1.05, p = .5885$

GWBENE

(GWB subscale score for energy; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBENE	N	Mean	S.D.	Variance	T	DF	P-value
1	1764	10.0062	4.3138	Unequal	4.0107	570.4	0.0001
2	391	9.028	4.3738	Equal	4.0462	2153.0	0.0001

$F(390,1763) = 1.03, p = .7137$

GWBSAT

(GWB subscale score for satisfying/interesting life; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBSAT	N	Mean	S.D.	Variance	T	DF	P-value
1	1783	4.6315	2.3163	Unequal	0.1143	5578.8	0.9090
2	394	4.6168	2.3210	Equal	0.1145	2175.0	0.9089

$F(393,1782) = 1.00, p = .9455$

GWBCHR

(GWB subscale score for cheerful mood; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBCHR	N	Mean	S.D.	Variance	T	DF	P-value
1	1745	14.9135	5.2480	Unequal	2.9628	591.7	0.0032
2	390	14.0692	5.0507	Equal	2.8916	2133.0	0.0039

$F(1744,389) = 1.08, p = .3464$

GWBTEN

(GWB subscale score for relaxed vs. tense; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBTEN	N	Mean	S.D.	Variance	T	DF	P-value
1	1754	14.2406	5.6934	Unequal	4.2641	593.3	0.0001
2	393	12.9186	5.5239	Equal	4.1831	2145.0	0.0000

$F(1753,392) = 1.06, p = .4575$

GWBEMO

(GWB subscale score for emotional/behavioral control; high score reflects self-representation of well-being)

(1=men 2=women)

GWBEMO	N	Mean	S.D.	Variance	T	DF	P-value
1	1774	10.6685	3.6268	Unequal	1.3065	608.9	0.1919
2	395	10.4177	3.4102	Equal	1.2564	2167.0	0.2091

$F(1773,394) = 1.13, p = .1271$

SENIOR ENLISTED MEN vs. SENIOR ENLISTED WOMEN

OCEDUC (using row %)

N Tot=782	N	1=all men	2=all women	DF	Chi-Square	P-value
OCEDUC				2,780	3.341	0.188
1	429	387 (90.21%)	42 (9.79%)			
2	302	261 (86.42%)	41 (13.58%)			
3	51	43 (84.31%)	8 (15.69%)			
	782	691	91			

OCEDUC : 1=hs or less, 2=some college, 3=college/college +
1=men 2=women

OCRACE (using row %)

N Tot=778	N	1=all men	2=all women	DF	Chi-Square	P-value
OCRACE				2,776	10.867	0.004
1	417	380 (91.13%)	37 (8.87%)			
2	220	181 (82.27%)	39 (17.73%)			
3	141	125 (88.65%)	16 (11.35%)			
	778	686	92			

OCRACE: 1=white, 2=black, 3=other
1=men 2=women

MARSTAT (using row %)

N Tot=781	N	1=all men	2=all women	DF	Chi-Square	P-value
MARSTAT				5,776	29.300	0.000
1	69	52 (75.36%)	17 (24.64%)			
2	69	57 (82.61%)	12 (17.39%)			
3	63	51 (82.61%)	12 (29.05%)			
4	1	0 (0.00%)	1 (100.00%)			
5	146	134 (91.78%)	12 (8.22%)			
6	433	395 (91.22%)	38 (8.78%)			
	781	689	92			

MARSTAT : 1=nvr mar, 2=div, 3=sep, 4=wid, 5=remarried, 6=1st marriage
1=men 2=women

OCMARRIG (using row %)

N Tot=781	N	1=all men	2=all women	DF	Chi-Square	P-value
OCMARRIG				2,779	22.787	0.000
0	69	52 (75.36%)	17 (24.64%)			
1	133	108 (81.20%)	25 (18.80%)			
2	579	529 (91.36%)	50 (8.64%)			
	781	689	92			

OCMARRIG: 0=nvr marr 1=if loss, 2=if married
1=men 2=women

OCLOCAT (using row %)

N Tot=785	N	1=all men	2=all women	DF	Chi-Square	P-value
OCLOCAT				1,784	0.130	0.719
0	260	228 (87.69%)	32 (12.31%)			
1	525	465 (88.57%)	60 (11.43%)			
	785	693	92			

OCLOCAT: 0=Ft. Ord 1=Ft. Carson

1=men 2=women

RESIDE (using row %)

N Tot=782	N	1=all men	2=all women	DF	Chi-Square	P-value
RESIDE				2,780	11.948	0.003
1	93	77 (82.80%)	16 (17.20%)			
2	215	203 (94.42%)	12 (5.58%)			
3	474	410 (86.50%)	64 (13.50%)			
	782	690	92			

RESIDE: 1=barracks, 2=on-post, 3=off-post

1=men 2=women

SUPRVISR (using row %)

N Tot=758	N	1=all men	2=all women	DF	Chi-Square	P-value
SUPRVISR				1,757	3.207	0.073
1	143	120 (83.92%)	23 (16.08%)			
2	615	549 (89.27%)	66 (10.73%)			
	758	669	89			

SUPRVISR: 0=non-supervisor, 1=supervisor

1=men 2=women

OCWKHRS (using row %)

N Tot=775	N	1=all men	2=all women	DF	Chi-Square	P-value
OCWKHRS				3,772	1.878	0.598
1	64	54 (84.38%)	10 (15.63%)			
2	535	471 (88.04%)	64 (11.96%)			
3	131	119 (90.84%)	12 (9.16%)			
4	45	39 (86.67%)	6 (13.33%)			
	775	683	92			

OCWKHRS : 1=1-8, 2=9-12, 3=13-15, 4=16+

1=men 2=women

OCWKENDS (using row %)

N Tot=773	N	1=all men	2=all women	DF	Chi-Square	P-value
OCWKENDS				3,770	4.997	0.172
1	157	134 (85.35%)	23 (14.65%)			
2	422	383 (90.76%)	39 (9.24%)			
3	144	383 (90.76%)	21 (14.58%)			
4	50	123 (85.42%)	6 (12.00%)			
	773	684 (88.00%)	89			

OCWKENDS : 1=1-8, 2=9-12, 3=13-15, 4=16+

1=men 2=women

HOMEOT (using row %)

N Tot=782	N	1=all men	2=all women	DF	Chi-Square	P-value
HOMEOT				3,779	6.947	0.074
1	113	100 (88.50%)	13 (11.50%)			
2	226	191 (84.51%)	35 (15.49%)			
3	235	217 (92.34%)	18 (7.66%)			
4	208	182 (87.50%)	26 (12.50%)			
	782	690	92			

1=never, 2=seldom, 3=sometimes, 4=most of the time

1=men 2=women

DIFSCHEd (using row %)

N Tot=767	N	1=all men	2=all women	DF	Chi-Square	P-value
DIFSCHEd				1,766	6.879	0.009
1	391	334 (85.42%)	57 (14.58%)			
2	376	344 (91.49%)	32 (8.51%)			
	767	678	89			

DIFSCHEd: 1= would prefer diff sched 2=current sched okay

1=men 2=women

DTFLD (using row %)

N Tot=759	N	1=all men	2=all women	DF	Chi-Square	P-value
DTFLD				5,754	4.089	0.5337
1	49	44 (89.80%)	5 (10.20%)			
2	80	70 (87.50%)	10 (12.50%)			
3	101	91 (90.10%)	10 (9.90%)			
4	159	145 (91.19%)	14 (8.81%)			
5	281	249 (88.61%)	32 (11.39%)			
6	89	74 (83.15%)	15 (16.85%)			
	759	673	759			

DTFLD : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=

1=men 2=women

DTGAR (using row %)

N Tot=755	N	1=all men	2=all women	DF	Chi-Square	P-value
DTGAR				4,751	1.903	0.754
1	331	29 (93.55%)	2 (6.45%)			
2	66	59 (89.39%)	7 (10.61%)			
3	115	99 (86.09%)	16 (13.91%)			
4	163	147 (90.18%)	16 (9.82%)			
5	380	337 (88.68%)	43 (11.32%)			
	755	671	84			

DTGAR : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=

1=men 2=women

AMTWRK (using row %)

N Tot=779	N	1=all men	2=all women	DF	Chi-Square	P-value
AMTWRK				2,777	0.323	0.851
1	316	281 (88.92%)	35 (11.08%)			
2	372	326 (87.63%)	46 (12.37%)			
3	91	81 (89.01%)	10 (10.99%)			
	779	688	91			

AMTWRK: 1=too much, 2=about right, 3=not enough work

1=men 2=women

GETOUT (using row %)

N Tot=779	N	1=male	2=female	DF	Chi-Square	P-value
GETOUT				4, 775	8.657	0.070
1	234	215 (91.88%)	19 (8.12%)			
2	152	131 (86.18%)	21 (13.82%)			
3	149	136 (91.28%)	13 (8.72%)			
4	98	84 (85.71%)	14 (14.29%)			
5	146	122 (83.56%)	24 (16.44%)			
	779	688	91			

GETOUT : 1=definitely not, 2=probably not, 3=not sure, 4=probably get out, 5=definitely get out
(want to get out of Army)

1=men 2=women

PERMOR(using row %)

N Tot=773	N	1=male	2=female	DF	Chi-Square	P-value
PERMOR				4,769	35.616	0.000
1	49	36 (73.47%)	13 (26.53%)			
2	113	88 (77.88%)	25 (22.12%)			
3	301	266 (88.37%)	35 (11.63%)			
4	234	222 (94.87%)	12 (5.13%)			
5	76	72 (94.74%)	4 (5.26%)			
	773	684	89			

PERMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high (personal morale)

SEX: 1=male 2=female

UNITMOR(using row %)

N Tot=766	N	1=male	2=female	DF	Chi-Square	P-value
UNITMOR				4,762	20.636	0.000
1	157	124 (78.98%)	33 (21.02%)			
2	187	165 (88.24%)	22 (11.76%)			
3	336	306 (91.07%)	30 (8.93%)			
4	72	69 (95.83%)	3 (4.17%)			
5	14	11 (78.57%)	3 (21.43%)			
	766	675	91			

UNITMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high (unit morale)

SEX: 1=male 2=female

W15A (using row %)

N Tot=776	N	1=male	2=female	DF	Chi-Square	P-value
W15A				1,775	4.170	0.041
1	128	106 (82.81%)	22 (17.19%)			
2	648	578 (89.20%)	70 (10.80%)			
	776	684				

W15A: 1=yes 2=no Saw a chaplain or counselor since arriving on post
SEX: 1=male 2=female

SLCASALL (using row %)

N Tot=734	N	1=male	2=female	DF	Chi-Square	P-value
SLCASALL				1,733	3.262	0.071
0 (non-case)	713	634 (88.92%)	79 (11.08%)			
1 (case)	21	16 (76.19%)	5 (23.81%)			
	734	650	84			

SLCASALL 1=caseness on customized 2 sd likert 0=non-case
SEX: 1=male 2=female

BMCASALL (using row %)

N Tot=734	N	1=male	2=female	DF	Chi-Square	P-value
BMCASALL				1,733	0.842	0.359
0 (non-case)	704	625 (88.78%)	79 (11.22%)			
1 (case)	30	25 (83.33%)	5 (16.67%)			
	734	650	84			

BMCASALL 1=caseness on customized 2 sd binary 0=non-case
SEX: 1=male 2=female

MISSWORK (using row %)

N Tot=782	N	1=male	2=female	DF	Chi-Square	P-value
MISSWORK				1,781	0.053	0.818
0 (non-case)	727	642 (88.31%)	85 (11.69%)			
1 (case)	55	48 (87.27%)	7 (12.73%)			
	782	690	92			

MISSWORK 1=miss work sometimes-always due to psych prob 0=never/rarely
SEX: 1=male 2=female

TAKEMEDS (using row %)

N Tot=779	N	1=male	2=female	DF	Chi-Square	P-value
TAKEMEDS				1,778	0.650	0.420
0 (no meds)	704	623 (88.49%)	81 (11.51%)			
1 (meds)	75	64 (85.33%)	11 (14.67%)			
	779	687	92			

TAKEMEDS 1=takes meds for psych prob 0=does not take meds for psych prob
SEX: 1=male 2=female

MDFREQNT (using row %)

N Tot=780	N	1=male	2=female	DF	Chi-Square	P-value
MDFREQNT				1,779	7.543	0.006
0 (infreq)	712	635 (89.19%)	77 (10.81%)			
1 (freq)	68	53 (77.94%)	15 (22.06%)			
	780					

MDFREQNT 1=frequent visits to doctors during past month 2=infreq or no MD visits

SEX: 1=male 2=female

column %)

OCEDUC (using column %)

N Tot=782	N	1=all men	2=all women	DF	Chi-Square	P-value
OCEDUC				2,780	3.341	0.188
1	429	387 (56.01%)	42 (46.15%)			
2	302	261 (37.77%)	41 (45.05%)			
3	51	43 (6.22%)	8 (8.79%)			
	782	691	91			

OCEDUC : 1=hs or less, 2=some college, 3=college/college +

1=men 2=women

OCRACE (using column %)

N Tot=778	N	1=all men	2=all women	DF	Chi-Square	P-value
OCRACE				2,776	10.867	0.004
1	417	380 (55.39%)	37 (40.22%)			
2	220	181 (26.38%)	39 (42.39%)			
3	141	125 (18.22%)	16 (17.39%)			
	778	686	92			

OCRACE: 1=white, 2=black, 3=other

1=men 2=women

MARSTAT (using column %)

N Tot=781	N	1=all men	2=all women	DF	Chi-Square	P-value
MARSTAT				5,776	29.300	0.000
1	69	52 (7.55%)	17 (18.48%)			
2	69	57 (8.37%)	12 (13.04%)			
3	63	51 (7.40%)	12 (13.04%)			
4	1	0 (0.00%)	1 (1.09%)			
5	146	134 (19.45%)	12 (13.04%)			
6	433	395 (57.33%)	38 (41.30%)			
	781	689	92			

MARSTAT : 1=nvr mar, 2=div, 3=sep, 4=wid, 5=remarried, 6=1st marriage

1=men 2=women

OCMARRIG (using column %)

N Tot=781	N	1=all men	2=all women	DF	Chi-Square	P-value
OCMARRIG				2,779	22.787	0.000
0	69	52 (7.55%)	17 (18.48%)			
1	133	108 (15.67%)	25 (27.17%)			
2	579	529 (76.78%)	50 (54.355%)			
	781	689	92			

OCMARRIG: 0=nvr marr 1=if loss, 2=if married
1=men 2=women

OCLOCAT (using column %)

N Tot=785	N	1=all men	2=all women	DF	Chi-Square	P-value
OCLOCAT				1,784	0.130	0.719
0	260	228 (32.90%)	32 (34.78%)			
1	525	465 (67.10%)	60 (65.22%)			
	785	693	92			

OCLOCAT: 0=Ft. Ord 1=Ft. Carson
1=men 2=women

RESIDE (using column %)

N Tot=782	N	1=all men	2=all women	DF	Chi-Square	P-value
RESIDE				2,780	11.948	0.003
1	93	77 (11.16%)	16 (17.39%)			
2	215	203 (29.42%)	12 (13.04%)			
3	474	410 (59.42%)	64 (69.57%)			
	782	690	92			

RESIDE: 1=barracks, 2=on-post, 3=off-post
1=men 2=women

SUPRVISR (using column %)

N Tot=758	N	1=all men	2=all women	DF	Chi-Square	P-value
SUPRVISR				1,757	3.207	0.073
1	143	120 (17.94%)	23 (25.84%)			
2	615	549 (82.06%)	66 (74.16%)			
	758	669	89			

SUPRVISR: 0=non-supervisor, 1=supervisor
1=men 2=women

OCWKHRS (using column %)

N Tot=775	N	1=all men	2=all women	DF	Chi-Square	P-value
OCWKHRS				3,772	1.878	0.598
1	64	54 (7.91%)	10 (10.87%)			
2	535	471 (68.96%)	64 (69.57%)			
3	131	119 (17.42%)	12 (13.04%)			
4	45	39 (5.71%)	6 (6.52%)			
	775	683	92			

OCWKHRS : 1=1-8, 2=9-12, 3=13-15, 4=16+
1=men 2=women

OCWKENDS (using column %)

N Tot=773	N	1=all men	2=all women	DF	Chi-Square	P-value
OCWKENDS				3,770	4.997	0.172
1	157	134 (19.59%)	23 (25.84%)			
2	422	383 (55.99%)	39 (43.82%)			
3	144	123 (17.98%)	21 (23.60%)			
4	50	44 (6.43%)	6 (6.74%)			
	773	684 (%)	89			

OCWKENDS : 1=1-8, 2=9-12, 3=13-15, 4=16+

1=men 2=women

HOMEOT (using column %)

N Tot=782	N	1=all men	2=all women	DF	Chi-Square	P-value
HOMEOT				3,779	6.947	0.074
1	113	100 (14.49%)	13 (14.13%)			
2	226	191 (27.68%)	35 (38.04%)			
3	235	217 (31.45%)	18 (19.57%)			
4	208	182 (26.38%)	26 (28.26%)			
	782	690	92			

1=never, 2=seldom, 3=sometimes, 4=most of the time

1=men 2=women

DIFSCHEd (using column %)

N Tot=767	N	1=all men	2=all women	DF	Chi-Square	P-value
DIFSCHEd				1,766	6.879	0.009
1	391	334 (49.26%)	57 (64.04%)			
2	376	344 (50.74%)	32 (35.96%)			
	767	678	89			

DIFSCHEd: 1= would prefer diff sched 2=current sched okay

1=men 2=women

DTFLD (using column %)

N Tot=759	N	1=all men	2=all women	DF	Chi-Square	P-value
DTFLD				5,754	4.089	0.5337
1	49	44 (6.54%)	5 (5.81%)			
2	80	70 (10.40%)	10 (11.63%)			
3	101	91 (13.52%)	10 (11.63%)			
4	159	145 (21.55%)	14 (16.28%)			
5	281	249 (37.00%)	32 (37.21%)			
6	89	74 (11.00%)	15 (17.44%)			
	759	673	759			

DTFLD : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=

1=men 2=women

DTGAR (using column %)

N Tot=755	N	1=all men	2=all women	DF	Chi-Square	P-value
DTGAR				4,751	1.903	0.754
1	331	29 (4.32%)	2 (2.338%)			
2	66	59 (8.79%)	7 (8.33%)			
3	115	99 (14.75%)	16 (19.05%)			
4	163	147 (21.91%)	16 (19.05%)			
5	380	337 (50.22%)	43 (51.19%)			
	755	671	84			

DTGAR : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=
1=men 2=women

AMTWRK (using column %)

N Tot=779	N	1=all men	2=all women	DF	Chi-Square	P-value
AMTWRK				2,777	0.323	0.851
1	316	281 (40.84%)	35 (38.46%)			
2	372	326 (47.38%)	46 (50.55%)			
3	91	81 (11.77%)	10 (10.99%)			
	779	688	91			

AMTWRK: 1=too much, 2=about right, 3=not enough work
1=men 2=women

GETOUT (using column %)

N Tot=779	N	1=male	2=female	DF	Chi-Square	P-value
GETOUT				4,775	8.657	0.070
1	234	215 (31.25%)	19 (20.88%)			
2	152	131 (19.04)	21 (23.08%)			
3	149	136 (19.77%)	13 (14.29%)			
4	98	84 (12.21%)	14 (15.38%)			
5	146	122 (17.73%)	24 (26.37%)			
	779	688	91			

GETOUT : 1=definitely not, 2=probably not, 3=not sure, 4=probably get out, 5=definitely get out
(want to get out of Army
1=men 2=women

PERMOR(using column %)

N Tot=773	N	1=male	2=female	DF	Chi-Square	P-value
PERMOR				4,769	35.616	0.000
1	49	36 (5.26%)	13 (14.61%)			
2	113	88 (12.87%)	25 (28.09%)			
3	301	266 (38.89%)	35 (39.33%)			
4	234	222 (32.46%)	12 (13.48%)			
5	76	72 (10.53%)	4 (4.49%)			
	773	684	89			

PERMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high (personal morale)
SEX: 1=male 2=female

UNITMOR(using column %)

N Tot=766	N	1=male	2=female	DF	Chi-Square	P-value
UNIMOR				4,762	20.636	0.000
1	157	124 (18.37%)	33 (36.26%)			
2	187	165 (24.44%)	22 (24.18%)			
3	336	306 (45.33%)	30 (32.97%)			
4	72	69 (10.22%)	3 (3.30%)			
5	14	11 (1.63%)	3 (3.30%)			
	766	675	91			

UNITMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high (unit morale)

SEX: 1=male 2=female

W15A (using column %)

N Tot=776	N	1=male	2=female	DF	Chi-Square	P-value
W15A				1,775	4.170	0.041
1	128	106 (15.50%)	22 (23.91%)			
2	648	578 (84.50%)	70 (76.09%)			
	776	684				

W15A: 1=yes 2=no Saw a chaplain or counselor since arriving on post

SEX: 1=male 2=female

SLCASALL (using column%)

N Tot=734	N	1=male	2=female	DF	Chi-Square	P-value
SLCASALL				1,733	3.262	0.071
0 (non-case)	713	634 (97.54%)	79 (94.05%)			
1 (case)	21	16 (2.46%)	5 (5.95%)			
	734	650	84			

SLCASALL 1=caseness on customized 2 sd likert 0=non-case

SEX: 1=male 2=female

BMCASALL (using column %)

N Tot=734	N	1=male	2=female	DF	Chi-Square	P-value
BMCASALL				1,733	0.842	0.359
0 (non-case)	704	625 (96.15%)	79 (94.05%)			
1 (case)	30	25 (3.85%)	5 (5.95%)			
	734	650	84			

BMCASALL 1=caseness on customized 2 sd binary 0=non-case

SEX: 1=male 2=female

MISSWORK (using column%)

N Tot=782	N	1=male	2=female	DF	Chi-Square	P-value
MISSWORK				1,781	0.053	0.818
0 (non-case)	727	642 (93.04%)	85 (92.39%)			
1 (case)	55	48 (6.96%)	7 (7.61%)			
	782	690	92			

MISSWORK 1=miss work sometimes-always due to psych prob 0=never/rarely
SEX: 1=male 2=female

TAKEMEDS (using column %)

N Tot=779	N	1=male	2=female	DF	Chi-Square	P-value
TAKEMEDS				1,778	0.650	0.420
0 (no meds)	704	623 (90.68%)	81 (88.04%)			
1 (meds)	75	64 (9.32%)	11 (11.96%)			
	779	687	92			

TAKEMEDS 1=takes meds for psych prob 0=does not take meds for psych prob
SEX: 1=male 2=female

MDFREQNT (using column %)

N Tot=780	N	1=male	2=female	DF	Chi-Square	P-value
MDFREQNT				1,779	7.543	0.006
0 (infreq)	712	635 (92.30%)	77 (83.70%)			
1 (freq)	68	53 (7.70%)	15 (16.30%)			
	780					

MDFREQNT 1=frequent visits to doctors during past month 2=infreq or no MD visits
SEX: 1=male 2=female

SLGHQ

(total score on likert scored GHQ)
(1=male 2=female)

SLGHQ	N	Mean	S.D.	Variance	T	DF	P-value
1	650	44.4867	24.6263	Unequal	-1.8397	101.1	0.0687
2	84	50.2711	27.4232	Equal	-1.9989	732.0	0.0460

$F(83,649) = 1.24, p = .1668$

BMGHQ

(total score on binary scored GHQ)

(1=male 2=female)

BMGHQ	N	Mean	S.D.	Variance	T	DF	P-value
1	650	7.7231	11.1414	Unequal	-2.1878	99.3	0.0310
2	84	10.9816	13.0495	Equal	-2.4709	732.0	0.0137

$F(83,649) = 1.37, p = .0416$

V8

(total GWB score - 2 missing allowed)

(1=male 2=female)

V8	N	Mean	S.D.	Variance	T	DF	P-value
1	676	67.0238	19.5900	Unequal	1.9655	115.0	0.0518
2	90	62.7706	19.2444	Equal	1.9389	764.0	0.0529

$F(675,89) = 1.04, p = .8562$

V9

(total GWB score - no missing allowed)

(1=male 2=female)

V9	N	Mean	S.D.	Variance	T	DF	P-value
1	623	67.1091	19.3529	Unequal	1.4596	106.1	0.1474
2	83	63.8675	18.9607	Equal	1.4369	704.0	0.1512

$F(622,82) = 1.04, p = .8396$

GWBWOR

(GWB subscale score for health worry; high score reflects a self-representation of well-being-)

(1=male 2=female)

GWBWOR	N	Mean	S.D.	Variance	T	DF	P-value
1	652	9.6917	4.0025	Unequal	-0.2095	113.4	0.8344
2	89	9.7865	4.0042	Equal	-0.2096	739.0	0.8340

$F(88,651) = 1.00, p = .9633$

GWBENE

(GWB subscale score for energy; high score reflects a self-representation of well-being-)

(1=male 2=female)

GWBENE	N	Mean	S.D.	Variance	T	DF	P-value
1	673	10.6627	4.4381	Unequal	3.0621	109.5	0.0028
2	88	9.0795	4.5769	Equal	3.1355	759.0	0.0018

$F(87,672) = 1.06, p = .6701$

GWBSAT

(GWB subscale score for satisfying/interesting life; high score reflects a self-representation of well-being-)

(1=male 2=female)

GWBSAT	N	Mean	S.D.	Variance	T	DF	P-value
1	683	5.1318	2.2988	Unequal	1.3888	109.4	0.1677
2	89	4.7528	2.4368	Equal	1.4526	770.0	0.1468

$F(88,682) = 1.12, p = .4358$

GWBCHR

(GWB subscale score for cheerful mood; high score reflects a self-representation of well-being-)

(1=male 2=female)

GWBCHR	N	Mean	S.D.	Variance	T	DF	P-value
1	669	15.7803	5.0276	Unequal	2.5517	115.9	0.0120
2	90	14.3778	4.8773	Equal	2.4932	757.0	0.0129

$F(668,89) = 1.06, p = .7367$

GWBTEN

(GWB subscale score for relaxed vs. tense; high score reflects a self-representation of well-being-)

(1=male 2=female)

GWBTEN	N	Mean	S.D.	Variance	T	DF	P-value
1	674	14.6261	5.5374	Unequal	1.4270	115.2	0.1563
2	90	13.7556	5.4222	Equal	1.4043	762.0	0.1607

$F(673,89) = 1.04, p = .8251$

GWBEMO

(GWB subscale score for emotional/behavioral control; high score reflects self-representation of well-being)

(1=male 2=female)

GWBEMO	N	Mean	S.D.	Variance	T	DF	P-value
1	682	11.2287	3.4082	Unequal	-0.1184	119.3	0.9050
2	89	11.2697	3.0180	Equal	-0.1079	769.0	0.9141

$F(681,88) = 1.28, p = .1531$

JUNIOR ENLISTED MEN vs. JUNIOR ENLISTED WOMEN

OCEDUC (using row %)

N Tot=1426	N	1=men	2=women	DF	Chi-Square	P-value
OCEDUC				2,1424	25.815	0.000
1	1056	860 (81.44%)	196 (18.56%)			
2	327	223 (68.20%)	104 (31.80%)			
3	43	34 (79.07%)	9 (20.93%)			
	1426	1117	309			

OCEDUC : 1=hs or less, 2=some college, 3=college/college +
 1=men 2=women

OCRACE (using row %)

N Tot=1428	N	1=men	2=women	DF	Chi-Square	P-value
OCRACE				2,1426	16.399	0.000
1	883	716 (81.09%)	167 (18.91%)			
2	390	277 (71.03%)	113 (28.97%)			
3	155	124 (80.00%)	31 (20.00%)			
	1428	1117	311			

OCRACE: 1=white, 2=black, 3=other
 1=men 2=women

MARSTAT (using row %)

N Tot=1429	N	1=men	2=women	DF	Chi-Square	P-value
GETOUT				5,1424	30.378	0.000
1	7221	578 (80.17%)	143 (19.83%)			
2	54	40 (74.07%)	14 (25.93%)			
3	64	39 (60.94%)	25 (39.06%)			
4	2	0 (0.00%)	2 (100.00%)			
5	53	33 (62.26%)	20 (37.74%)			
6	535	431 (80.56%)	104 (19.44%)			
	1429	1121	308			

MARSTAT : 1=nvr mar, 2=div, 3=sep, 4=wid, 5=remarried, 6=1st marriage
 1=men 2=women

OCMARRIG (using row %)

N Tot=1429	N	1=men	2=women	DF	Chi-Square	P-value
OCMARRIG				2,1427	12.628	0.002
0	721	578 (80.17%)	143 (19.83%)			
1	120	79 (65.83%)	41 (34.17%)			
2	588	464 (78.91%)	124 (21.09%)			
	1429	1121	308			

OCMARRIG: 0=nvr marr 1=if loss, 2=if married
1=men 2=women

OCLOCAT (using row %)

N Tot=1436	N	1=men	2=women	DF	Chi-Square	P-value
OCLOCAT				1,1435	1.995	0.158
0	406	328 (80.79%)	78 (19.21%)			
1	1030	797 (77.38%)	233 (22.62%)			
	1436	1125	311			

OCLOCAT: 0=Ft. Ord 1=Ft. Carson
1=men 2=women

RESIDE (using row %)

N Tot=1397	N	1=men	2=women	DF	Chi-Square	P-value
RESIDE				2,1395	12.489	0.002
1	718	578 (80.50%)	140 (19.50%)			
2	90	78 (86.67%)	12 (13.33%)			
3	589	435 (73.85%)	154 (26.15%)			
	1397	1091	306			

RESIDE: 1=barracks, 2=on-post, 3=off-post
(want to get out of Army)
1=men 2=women

SUPRVISR (using row %)

N Tot=1405	N	1=men	2=women	DF	Chi-Square	P-value
SUPRVISR				1,1404	1.195	0.274
1	1217	962 (79.05%)	255 (20.95%)			
2	188	142 (75.53%)	46 (24.47%)			
	1405	1104	301			

SUPRVISR: 0=non-supervisor, 1=supervisor
1=men 2=women

OCWKHRS (using row %)

N Tot=1410	N	1=men	2=women	DF	Chi-Square	P-value
OCWKHRS				3,1407	11.856	0.008
1	265	222 (83.77%)	43 (16.23%)			
2	1009	765 (75.82%)	244 (24.18%)			
3	111	91 (81.98%)	20 (18.02%)			
4	25	23 (92.00%)	2 (8.00%)			
	1410	1101	309			

OCWKHRS : 1=1-8, 2=9-12, 3=13-15, 4=16+

1=men 2=women

OCWKENDS (using row %)

N Tot=1402	N	1=men	2=women	DF	Chi-Square	P-value
OCWKENDS				3,1399	3.893	0.273
1	514	398 (77.43%)	116 (22.57%)			
2	675	542 (80.30%)	133 (19.70%)			
3	155	114 (73.55%)	41 (26.45%)			
4	58	45 (77.59%)	13 (22.41%)			
	1402	1099	303			

OCWKENDS : 1=1-8, 2=9-12, 3=13-15, 4=16+

1=men 2=women

HOMEOT (using row %)

N Tot=1433	N	1=men	2=women	DF	Chi-Square	P-value
HOMEOT				3,1430	3.795	0.285
1	190	141 (74.21%)	49 (25.72%)			
2	351	280 (79.77%)	71 (20.23%)			
3	414	318 (76.81%)	96 (23.19%)			
4	478	383 (80.13%)	95 (19.87%)			
	1433	1122	311			

1=never, 2=seldom, 3=sometimes, 4=most of the time

1=men 2=women

DIFSCHEDED (using row %)

N Tot=1412	N	1=men	2=women	DF	Chi-Square	P-value
DIFSCHEDED				1,1411	1.118	0.290
1	710	550 (77.46%)	160 (22.54%)			
2	702	560 (79.77%)	142 (20.23%)			
	1412	1110	302			

DIFSCHEDED: 1= would prefer diff sched 2=current sched okay

1=men 2=women

DTFLD (using row %)

N Tot=1373	N	1=men	2=women	DF	Chi-Square	P-value
DTFLD				5,1368	18.499	0.002
1	137	107 (78.10%)	30 (21.90%)			
2	163	138 (84.66%)	25 (15.34%)			
3	189	153 (80.95%)	36 (19.05%)			
4	255	214 (83.992%)	41 (16.08%)			
5	455	347 (76.26%)	108 (23.74%)			
6	174	121 (69.54%)	53 (30.46%)			
	1373	1080	293			

DTFLD : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=
1=men 2=women

DTGAR (using row %)

N Tot=1351	N	1=men	2=women	DF	Chi-Square	P-value
DTGAR				4,1347	2.239	0.692
1	132	105 (79.55%)	27 (20.45%)			
2	146	113 (77.40%)	33 (22.60%)			
3	282	231 (81.91%)	51 (18.09%)			
4	322	254 (78.88%)	68 (21.12%)			
5	469	364 (77.61%)	105 (22.39%)			
	1351	1067	284			

DTGAR : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=
1=men 2=women

AMTWRK (using row %)

N Tot=1403	N	1=men	2=women	DF	Chi-Square	P-value
AMTWRK				2,1401	2.172	0.338
1	376	296 (78.72%)	80 (21.28%)			
2	727	559 (76.89%)	168 (23.11%)			
3	300	243 (81.00%)	57 (19.00%)			
	1403	1098	305			

AMTWRK: 1=too much, 2=about right, 3=not enough work
1=men 2=women

GETOUT (using row %)

N Tot=1426	N	1=men	2=women	DF	Chi-Square	P-value
GETOUT				4, 1422	14.929	0.005
1	171	123 (71.93%)	48 (28.07%)			
2	244	189 (77.46%)	55 (22.54%)			
3	284	229 (80.63%)	55 (22.54%)			
4	234	169 (72.22%)	65 (27.78%)			
5	493	406 (82.35%)	87 (17.65%)			
	1426	1116	310			

GETOUT : 1=definitely not, 2=probably not, 3=not sure, 4=probably get out, 5=definitely get out
(want to get out of Army)

1=men 2=women

PERMOR(using row %)

N Tot=1419	N	1=men	2=women	DF	Chi-Square	P-value
PERMOR				4, 1415	6.733	0.151
1	185	135 (72.97%)	50 (27.03%)			
2	254	195 (76.77%)	59 (23.23)			
3	569	463 (81.37%)	106 (18.63%)			
4	310	241 (77.74%)	69 (22.26%)			
5	101	78 (77.23%)	23 (22.77%)			
	1419	1112	307			

PERMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high (personal morale)
SEX: 1=male 2=female

W15A (using row %)

N Tot=1420	N	1=men	2=women	DF	Chi-Square	P-value
W15A				1,1429	1.930	0.165
0 (male)	269	202 (75.09%)	67 (24.91%)			
1 (female)	1151	909 (78.97%)	242 (21.03%)			
	1420	1111	309			

W15A: 1=yes 2=no Saw a chaplain or counselor since arriving on post
SEX: 1=male 2=female

UNITMOR(using row %)

N Tot=1398	N	1=men	2=women	DF	Chi-Square	P-value
UNIMOR				4,1394	15.182	0.004
1	467	339 (72.59%)	129 (27.41%)			
2	375	303 (80.80%)	72 (19.20%)			
3	461	379 (82.21%)	82 (17.79%)			
4	81	61 (75.31%)	20 (24.69%)			
5	14	10 (71.43%)	4 (28.57%)			
	1398	1092	306			

UNITMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high
(personal morale)
SEX: 1=male 2=female

SLCASALL (using row %)

N Tot=1356	N	1=men	2=women	DF	Chi-Square	P-value
SLCASALL				1,1355	0.183	0.669
0 (non-case)	1292	1000 (77.40%)	292 (22.60%)			
1 (case)	64	51 (79.69%)	13 (20.31%)			
	1356	1051	305			

SLCASALL 1=caseness on customized 2 sd likert 0=non-case
SEX: 1=male 2=female

BMCASALL (using row %)

N Tot=1356	N	1=men	2=women	DF	Chi-Square	P-value
BMCASALL				1,1355	0.244	0.622
0 (non-case)	1263	977 (77.36%)	286 (22.64%)			
1 (case)	93	74 (79.57%)	19 (20.43%)			
	1356	1051	305			

BMCASALL 1=caseness on customized 1 sd binary 0=non-case

SEX: 1=male 2=female

MISSWORK (using row %)

N Tot=1424	N	1=men	2=women	DF	Chi-Square	P-value
MISSWORK				1,1423	1.865	0.172
0 (non-case)	144	967 (77.73%)	277 (22.27%)			
1 (case)	180	148 (82.22%)	32 (17.78%)			
	1424	1115				

MISSWORK 1=miss work sometimes-always due to psych prob 0=never/rarely

SEX: 1=male 2=female

TAKEMEDS (using row %)

N Tot=1427	N	1=men	2=women	DF	Chi-Square	P-value
TAKEMEDS				1,1426	2.222	0.136
0 (no meds)	1284	999 (77.80%)	285 (22.20%)			
1 (meds)	143	119 (83.22%)	24 (16.78%)			
	1427	1118	309			

TAKEMEDS 1=takes meds for psych prob 0=does not take meds for psych prob

SEX: 1=male 2=female

MDFREQNT (using row %)

N Tot=1426	N	1=men	2=women	DF	Chi-Square	P-value
MDFREQNT				1,14.603	14.603	0.000
0 (infreq)	1233	987 (80.05%)	246 (19.95%)			
1 (freq)	193	131 (67.88%)	62 (32.12%)			
	1426	1118	308			

MDFREQNT 1=frequent visits to doctors during past month 2=infreq or no MD visits

SEX: 1=male 2=female

column %

OCEDUC (using column%)

N Tot=1426	N	1=men	2=women	DF	Chi-Square	P-value
OCEDUC				2,1424	25.815	0.000
1	1056	860 (76.99%)	196 (63/43%)			
2	327	223 (19.96%)	104 (33.66%)			
3	43	34 (3.04%)	9 (2.91%)			
	1426	1117	309			

OCEDUC : 1=hs or less, 2=some college, 3=college/college +
1=men 2=women

OCRACE (using column%)

N Tot=1428	N	1=men	2=women	DF	Chi-Square	P-value
OCRACE				2,1426	16.399	0.000
1	883	716 (64.10%)	167 (53.70%)			
2	390	277 (24.80%)	113 (36.33%)			
3	155	124 (11.10%)	31 (9.97%)			
	1428	1117	311			

OCRACE: 1=white, 2=black, 3=other
1=men 2=women

MARSTAT (using column %)

N Tot=1429	N	1=men	2=women	DF	Chi-Square	P-value
GETOUT				5,1424	30.378	0.000
1	7221	578 (51.56%)	143 (46.43%)			
2	54	40 (3.57%)	14 (4.55%)			
3	64	39 (3.48%)	25 (8.12%)			
4	2	0 (0%)	2 (0.65%)			
5	53	33 (2.94%)	20 (6.49%)			
6	535	431 (38.45%)	104 (33.77%)			
	1429	1121	308			

MARSTAT : 1=nvr mar, 2=div, 3=sep, 4=wid, 5=remarried, 6=1st marriage
1=men 2=women

OCMARRIG (using column%)

N Tot=1429	N	1=men	2=women	DF	Chi-Square	P-value
OCMARRIG				2,1427	12.628	0.002
0	721	578 (51.56%)	143 (46.43%)			
1	120	79 (7.05%)	41 (13.31%)			
2	588	464 (41.39%)	124 (40.26%)			
	1429	1121	308			

OCMARRIG: 0=nvr marr 1=if loss, 2=if married
1=men 2=women

OCLOCAT (using column%)

N Tot=1436	N	1=men	2=women	DF	Chi-Square	P-value
OCLOCAT				1,1435	1.995	0.158
0	406	328 (29.16%)	78 (25.08%)			
1	1030	797 (70.84%)	233 (74.92%)			
	1436	1125	311			

OCLOCAT: 0=Ft. Ord 1=Ft. Carson

1=men 2=women

RESIDE (using column%)

N Tot=1397	N	1=men	2=women	DF	Chi-Square	P-value
RESIDE				2,1395	12.489	0.002
1	718	578 (52.98%)	140 (45.75%)			
2	90	78 (7.15%)	12 (3.92%)			
3	589	435 (39.87%)	154 (50.33%)			
	1397	1091	306			

RESIDE: 1=barracks, 2=on-post, 3=off-post

1=men 2=women

SUPRVISR (using column%)

N Tot=1405	N	1=men	2=women	DF	Chi-Square	P-value
SUPRVISR				1,1404	1.195	0.274
1	1217	962 (87.14%)	255 (84.72%)			
2	188	142 (12.86%)	46 (15.28%)			
	1405	1104	301			

SUPRVISR: 0=non-supervisor, 1=supervisor

1=men 2=women

OCWKHRS (using column %)

N Tot=1410	N	1=men	2=women	DF	Chi-Square	P-value
OCWKHRS				3,1407	11.856	0.008
1	265	222 (20.16%)	43 (13.92%)			
2	1009	765 (69.48%)	244 (78.96%)			
3	111	91 (8.27%)	20 (6.47%)			
4	25	23 (2.09%)	2 (0.65%)			
	1410	1101	309			

OCWKHRS : 1=1-8, 2=9-12, 3=13-15, 4=16+

1=men 2=women

OCWKENDS (using column %)

N Tot=1402	N	1=men	2=women	DF	Chi-Square	P-value
OCWKENDS				3,1399	3.893	0.273
1	514	398 (36.21%)	116 (38.28%)			
2	675	542 (49.32%)	133 (43.89%)			
3	155	114 (10.37%)	41 (13.53%)			
4	58	45 (4.09%)	13 (4.29%)			
	1402	1099	303			

OCWKENDS : 1=1-8, 2=9-12, 3=13-15, 4=16+

1=men 2=women

HOMEOT (using column%)

N Tot=1433	N	1=men	2=women	DF	Chi-Square	P-value
HOMEOT				3,1430	3.795	0.285
1	190	141 (12.57%)	49 (15.76%)			
2	351	280 (24.96%)	71 (22.83%)			
3	414	318 (28.34%)	96 (30.87%)			
4	478	383 (34.14%)	95 (30.55%)			
	1433	1122	311			

1=never, 2=seldom, 3=sometimes, 4=most of the time

1=men 2=women

DIFSCHEd (using column%)

N Tot=1412	N	1=men	2=women	DF	Chi-Square	P-value
DIFSCHEd				1,1411	1.118	0.290
1	710	550 (49.55%)	160 (52.98%)			
2	702	560 (50.45%)	142 (47.02%)			
	1412	1110	302			

DIFSCHEd: 1= would prefer diff sched 2=current sched okay

1=men 2=women

DTFLD (using column%)

N Tot=1373	N	1=men	2=women	DF	Chi-Square	P-value
DTFLD				5,1368	18.499	0.002
1	137	107 (9.91%)	30 (10.24%)			
2	163	138 (12.78%)	25 (8.53%)			
3	189	153 (14.17%)	36 (12.29%)			
4	255	214 (19.81%)	41 (13.99%)			
5	455	347 (32.13%)	108 (36.86%)			
6	174	121 (11.20%)	53 (18.09%)			
	1373	1080	293			

DTFLD : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=

1=men 2=women

DTGAR (using column%)

N Tot=1351	N	1=men	2=women	DF	Chi-Square	P-value
DTGAR				4,1347	2.239	0.692
1	132	105 (9.84%)	27 (9.51%)			
2	146	113 (10.59%)	33 (11.62%)			
3	282	231 (21.65%)	51 (17.96%)			
4	322	254 (23.81%)	68 (23.94%)			
5	469	364 (34.11%)	105 (36.97%)			
	1351	1067	284			

DTGAR : 1=alm all, 2=>half, 3=@half, 4=<half, 5=@0, 6=

1=men 2=women

AMTWRK (using column %)

N Tot=1403	N	1=men	2=women	DF	Chi-Square	P-value
AMTWRK				2,1401	2.172	0.338
1	376	296 (26.96%)	80 (26.23%)			
2	727	559 (50.91%)	168 (55.08%)			
3	300	243 (22.13%)	57 (18.69%)			
	1403	1098	305			

AMTWRK: 1=too much, 2=about right, 3=not enough work

1=men 2=women

GETOUT (using column %)

N Tot=1426	N	1=men	2=women	DF	Chi-Square	P-value
GETOUT				4, 1422	14.929	0.005
1	171	123 (11.02%)	48 (15.48%)			
2	244	189 (16.94%)	55 (17.74%)			
3	284	229 (20.52%)	55 (17.74%)			
4	234	169 (15.14%)	65 (20.97%)			
5	493	406 (36.38%)	87 (28.06%)			
	1426	1116	310			

GETOUT : 1=definitely not, 2=probably not, 3=not sure, 4=probably get out, 5=definitely get out
(want to get out of Army)

SEX: 1=male 2=female

PERMOR(using column %)

N Tot=1419	N	1=men	2=women	DF	Chi-Square	P-value
PERMOR				4, 1415	6.733	0.151
1	185	135 (12.14%)	50 (16.29%)			
2	254	195 (17.54%)	59 (19.22%)			
3	569	463 (41.64%)	106 (34.53%)			
4	310	241 (21.67%)	69 (22.48%)			
5	101	78 (7.01%)	23 (7.49%)			
	1419	1112	307			

PERMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high (personal morale)

SEX: 1=male 2=female

UNITMOR(using column %)

N Tot=1398	N	1=men	2=women	DF	Chi-Square	P-value
UNIMOR				4,1394	15.182	0.004
1	467	339 (31.04%)	129 (41.83%)			
2	375	303 (27.75%)	72 (23.53%)			
3	461	379 (34.71%)	82 (26.80%)			
4	81	61 (5.59%)	20 (6.54%)			
5	14	10 (0.92%)	4 (1.31%)			
	1398	1092	306			

UNITMOR: 1=very low, 2=low, 3=moderate, 4=high, 5=very high (unit morale)

SEX: 1=male 2=female

W15A (using column %)

N Tot=1420	N	1=men	2=women	DF	Chi-Square	P-value
W15A				1,1429	1.930	0.165
0 (male)	269	202 (18.18%)	67 (21.68%)			
1 (female)	1151	909 (81.82%)	242 (78.32%)			
	1420	1111	309			

W15A: 1=yes 2=no Saw a chaplain or counselor since arriving on post
SEX: 1=male 2=female

SLCASALL (using column %)

N Tot=1356	N	1=men	2=women	DF	Chi-Square	P-value
SLCASALL				1,1355	0.183	0.669
0 (non-case)	1292	1000 (95.15%)	292 (95.74%)			
1 (case)	64	51 (4.85%)	13 (4.26%)			
	1356	1051	305			

SLCASALL 1=caseness on customized 2 sd likert 0=non-case
SEX: 1=male 2=female

BMCASALL (using column %)

N Tot=1356	N	1=men	2=women	DF	Chi-Square	P-value
BMCASALL				1,1355	0.244	0.622
0 (non-case)	1263	977 (92.96%)	286 (93.77%)			
1 (case)	93	74 (7.04%)	19 (6.23%)			
	1356	1051	305			

BMCASALL 1=caseness on customized 2 sd binary 0=non-case
SEX: 1=male 2=female

MISSWORK (using column %)

N Tot=1424	N	1=men	2=women	DF	Chi-Square	P-value
MISSWORK				1,1423	1.865	0.172
0 (non-case)	144	967 (86.73%)	277 (89.64%)			
1 (case)	180	148 (13.27%)	32 (10.36%)			
	1424	1115	309			

MISSWORK 1=miss work sometimes-always due to psych prob 0=never/rarely
SEX: 1=male 2=female

TAKEMEDS (using column%)

N Tot=1427	N	1=men	2=women	DF	Chi-Square	P-value
TAKEMEDS				1,1426	2.222	0.136
0 (no meds)	1284	999 (89.36%)	285 (92.23%)			
1 (meds)	143	119 (10.64%)	24 (7.77%)			
	1427	1118	309			

TAKEMEDS 1=takes meds for psych prob 0=does not take meds for psych prob
SEX: 1=male 2=female

MDFREQNT (using column%)

N Tot=1426	N	1=men	2=women	DF	Chi-Square	P-value
MDFREQNT				1,14.603	14.603	0.000
0 (infreq)	1233	987 (88.28%)	246 (79.87%)			
1 (freq)	193	131 (11.72%)	62 (20.13%)			
	1426	1118	308			

MDFREQNT 1=frequent visits to doctors during past month 2=infreq or no MD visits
SEX: 1=male 2=female

SLGHQ

(total score on likert scored GHQ)

(1=men 2=women)

SLGHQ	N	Mean	S.D.	Variance	T	DF	P-value
1	1051	50.3369	27.3994	unequal	-1.5321	516.5	0.1261
2	305	52.9573	25.9573	Equal	-1.4875	1354.0	0.1371

F(1050,304) = 1.11, $p = .2562$

BMGHQ

(total score on binary scored GHQ)

(1=men 2=women)

BMGHQ	N	Mean	S.D.	Variance	T	DF	P-value
1	1051	10.5365	12.6418	Unequal	-1.7980	507.0	0.0728
2	305	11.9793	12.2482	Equal	-1.7670	1354.0	0.0775

F(1050,304) = 1.07, $p = .5057$

V8

(total GWB score - 2 missing allowed)

(1=men 2=women)

V8	N	Mean	S.D.	Variance	T	DF	P-value
1	1087	62.0599	19.7005	Unequal	2.2670	499.7	0.0238
2	304	59.2410	19.0132	Equal	2.2221	1389.0	0.0264

F(1086,303) = 1.07, $p = .4531$

V9

(total GWB score - no missing allowed)

(1=men 2=women)

V9	N	Mean	S.D.	Variance	T	DF	P-value
1	992	62.2843	19.5725	Unequal	2.1638	453.6	0.0310
2	278	59.4676	19.0715	Equal	2.1324	1268.0	0.0332

$F(991,277) = 1.05, p = .6041$

GWBWOR

(GWB subscale score for health worry; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBWOR	N	Mean	S.D.	Variance	T	DF	P-value
1	1048	9.5391	3.9149	Unequal	2.4645	456.1	0.0141
2	292	8.8870	4.0220	Equal	2.5023	1338.0	0.0125

$F(291,1047) = 1.06.11, p = .5509$

GWBENE

(GWB subscale score for energy; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBENE	N	Mean	S.D.	Variance	T	DF	P-value
1	1089	9.5932	4.1856	Unequal	2.0807	471.4	0.0380
2	303	9.0132	4.3207	Equal	2.1184	1390.0	0.0343

$F(302,1088) = 1.07, p = .4764$

GWBSAT

(GWB subscale score for satisfying/interesting life; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBSAT	N	Mean	S.D.	Variance	T	DF	P-value
1	1098	4.3206	2.2745	Unequal	-1.7336	483.6	0.0836
2	305	4.57705	2.2887	Equal	--1.7397	1401.0	0.0821

$F(304,1097) = 1.01, p = .8780$

GWBCHR

(GWB subscale score for cheerful mood; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBCHR	N	Mean	S.D.	Variance	T	DF	P-value
1	1074	14.3622	5.3089	Unequal	1.1462	494.3	0.2523
2	300	13.9767	5.1058	Equal	1.1213	1372.0	0.2624

$F(1073,299) = 1.08, p = .4125$

GWBTEN

(GWB subscale score for relaxed vs. tense; high score reflects a self-representation of well-being-)

(1=men 2=women)

GWBTEN	N	Mean	S.D.	Variance	T	DF	P-value
1	1078	13.9907	5.7794	Unequal	3.6323	502.0	0.0003
2	303	12.6700	5.5382	Equal	3.5464	1379.0	0.0004

$F(1077,302) = 1.09, p = .3677$

GWBEMO

(GWB subscale score for emotional/behavioral control; high score reflects self-representation of well-being)

(1=men 2=women)

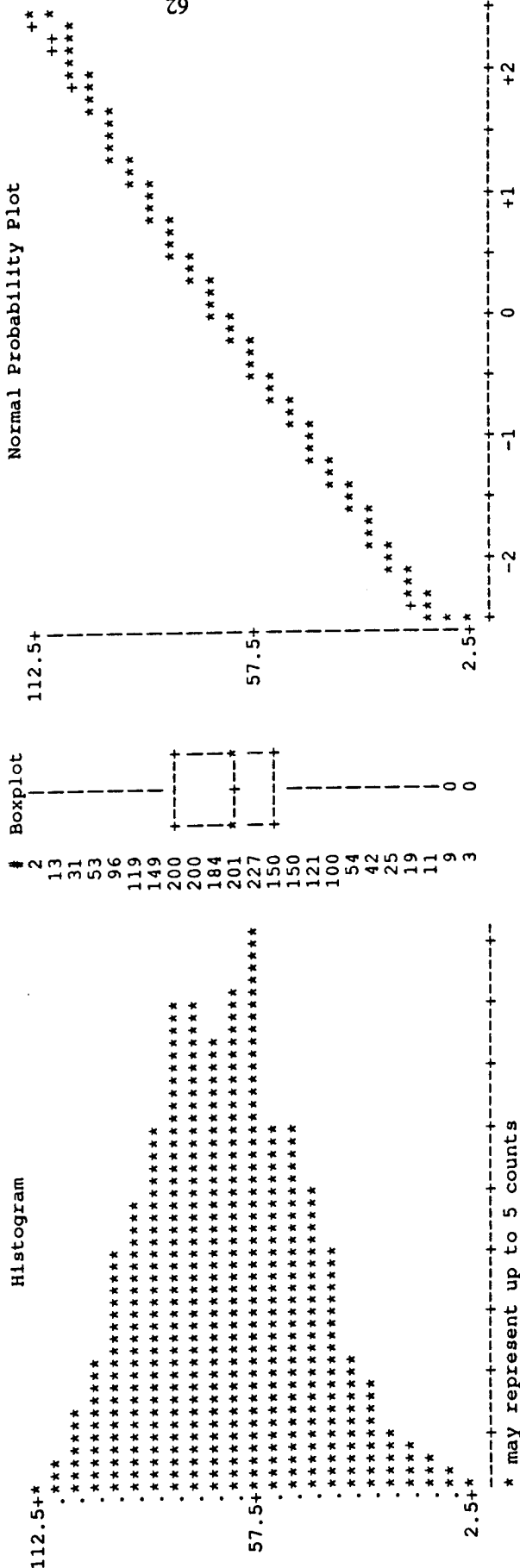
GWBEMO	N	Mean	S.D.	Variance	T	DF	P-value
1	1090	10.33119	3.7158	Unequal	0.6210	516.5	0.5349
2	306	10.1699	3.448164	Equal	0.5987	1394.0	0.5495

$F(1089,305) = 1.14, p = .1659$

UNIVARIATE ANALYSIS OF ALL ENLISTED SCORES ON THE GWB

Moments				Quantiles (Def-5)				Extremes			
N	2159	Sum Wgts	2159	100% Max	110	99%	103	Lowest	Obs	Highest	Obs
Mean	63.26457	Sum	136588.2	75% Q3	78	95%	94	1(	88)	108(	1944)
Std Dev	19.72649	Variance	389.1345	50% Med	64	90%	89	2(	1740)	109(	33)
Skewness	-0.2488	Kurtosis	-0.24506	25% Q1	50	10%	37.05882	3.176471(	1691)	109(	165)
USS	9480947	CSS	839752.2	0% Min	1	5%	29	5(	2176)	110(	779)
CV	31.18094	Std Mean	0.424545	Range	109	1%	13	5.294118(	1501)	110(	1653)
T:Mean=0	149.0174	Pr>|T|	0.0001	Q3-Q1	28						
Num ^= 0	2159	Num > 0	2159	Mode	63						
M(Sign)	1079.5	Pr>=|M|	0.0001								
Sgn Rank	1165860	Pr>=|S|	0.0001								
D:Normal	0.038817	Pr>D	<.01								

Missing Value
Count 64
% Count/Nobs 2.88



UNIVARIATE ANALYSIS OF ENLISTED MEN'S SCORES ON THE GWB

Moments

N 1765 Sum Wgts 1765
Mean 63.98278 Sum 112929.6
Std Dev 19.79776 Variance 391.9514
Skewness -0.26202 Kurtosis 25% Q1 50% Med
USS 7916952 CSS 691402.3 0% Min
CV 30.94233 Std Mean 0.471242
T:Mean=0 135.7748 Pr>|T| 0.0001 Range
Num ^= 0 1765 Num > 0 1765 Q3-Q1
M(Sign) 882.5 Pr>=|M| 0.0001 Mode
Sgn Rank 779247.5 Pr>=|S| 0.0001
W:Normal 0.97759 Pr<W 0.0001

Missing Value
Count 55
% Count/Nobs 3.02

Quantiles (Def=5)

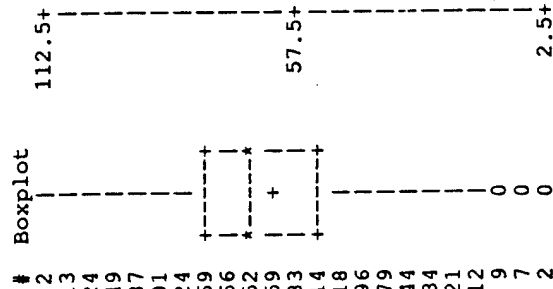
110	99%	104	Lowest	Obs	Highest	Obs
78	95%	94.5	1(	83)	108(	1583)
65	90%	89	2(	1424)	109(	33)
51	10%	38	5(	1780)	109(	150)
1	5%	30	5.294118(	1228)	110(	651)
109	1%	13	7(	1090)	110(	1356)

Extremes

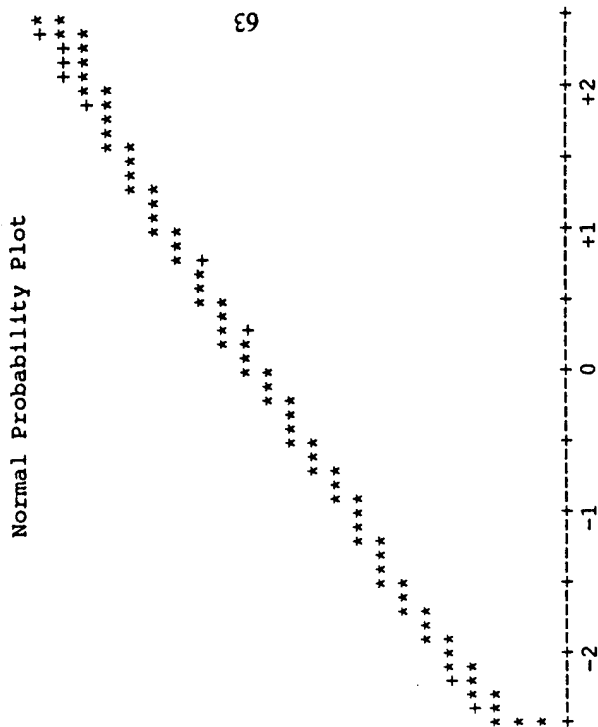
Histogram



Boxplot



Normal Probability Plot



* may represent up to 4 counts

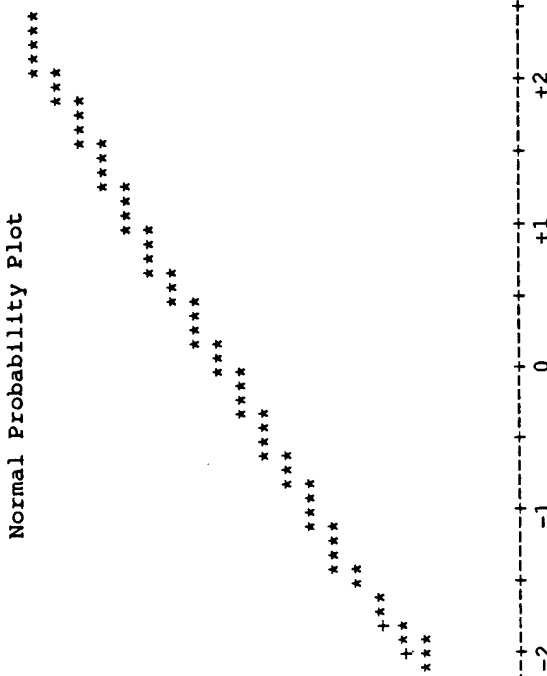
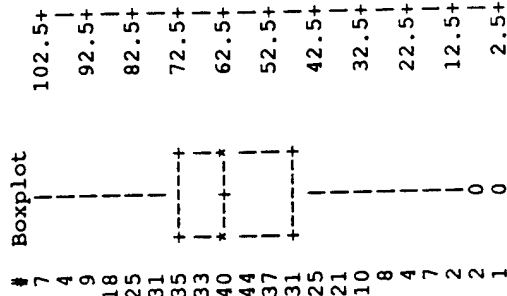
UNIVARIATE ANALYSIS OF ENLISTED WOMEN'S SCORES ON THE GWB

Moments				Quantiles (Def=5)				Extremes			
N	Mean	Std Dev	Skewness	Uss	CV	T:Mean=0	Num ^= 0	M(Sign)	Sgn Rank	WNormal	
394	60.04723	19.09938	-0.23074	1563995	31.80726	62.40535	394	197	38907.5	0.978095	
Sum Wgts	Sum	Variance	Kurtosis	CSS	Std Mean	Pr>|T|	Num > 0	Pr>=|M|	Pr>=|S|	Pr<W	
394	23658.61	364.7863	-0.08794	143361	0.962213	0.0001	394	0.0001	0.0001	0.0515	
100% Max	75% Q3	50% Med	25% Q1	0% Min	Range	Q3-Q1	Mode				
104	73.05882	60	47.64706	3.176471	100.8235	25.41176	63				
99%	95%	90%	10%	5%	1%						
103	90	84	36	26	12						
Lowest	Highest	Obs									
3.176471	102	307									
6	103	38									
7	103	238									
12	104	378									
14	104	47									
Obs											
34											
362											
382											
256											
312											

Missing Value
Count 9
% Count/Nobs 2.23

Stem Leaf
10 0023344
9 5567
9 001123334
8 55566667777889999
8 0000011111122222333344
7 5556666666667788888899999
7 0000001111112222223333334444
6 555556666667777788888999999
6 000000011111222223333333333344444
5 555555666666777777888889999999999
5 0000001111111222222344444444444
4 55555566666777778888889999999
4 000011222233333344444444444
3 5555666777888888899999999999999
3 122222233
2 55566888
2 2344
1 5567999
1 24
0 67
0 3

Multiply Stem.leaf by 10**+1

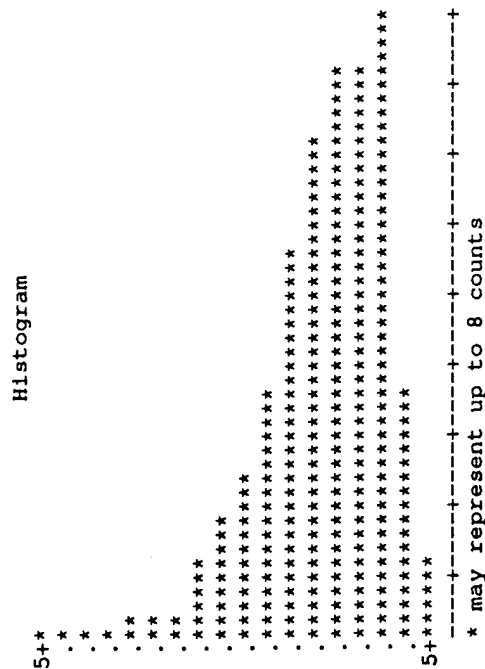


UNIVARIATE ANALYSIS OF ALL ENLISTED SCORES ON THE GHQ - LIKERT SCORING

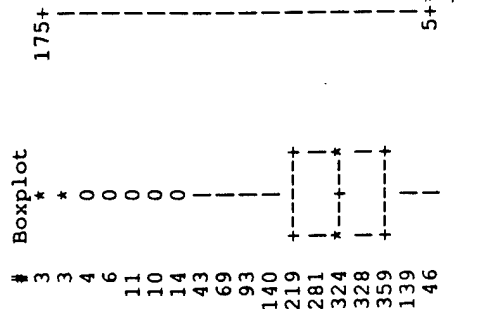
Moments				Quantiles (Def=5)				Extremes					
N	2092	Sum	Wgts	2092	100%	Max	179	99%	135	Lowest	Obs	Highest	Obs
Mean	48.88286	Sum		102262.9	75% Q3		62	95%	98.64407	0(	2195)	163(	1952)
Std Dev	26.51509	Variance		703.0498	50% Med		45	90%	84	0(	1841)	164(	2188)
Skewness	1.050639	Kurtosis		1.734434	25% Q1		29	10%	20	0(	1817)	172(	1463)
USS	6468982	CSS		1470077	0% Min		0	5%	15	0(	1596)	176(	2018)
CV	54.24209	Std Mean		0.579712				1%	3	0(	1556)	179(	1740)
T:Mean=0	84.32268	Pr>|T|		0.0001	Range		179						
Num ^= 0	2083	Num > 0		2083	Q3-Q1		33						
M(Sign)	1041.5	Pr>=|M|		0.0001	Mode		60						
Sgn Rank	1085243	Pr>=|S|		0.0001									
D:Normal	0.070848	Pr>D		<.01									

Missing Value
Count 131
% Count/Nobs 5.89

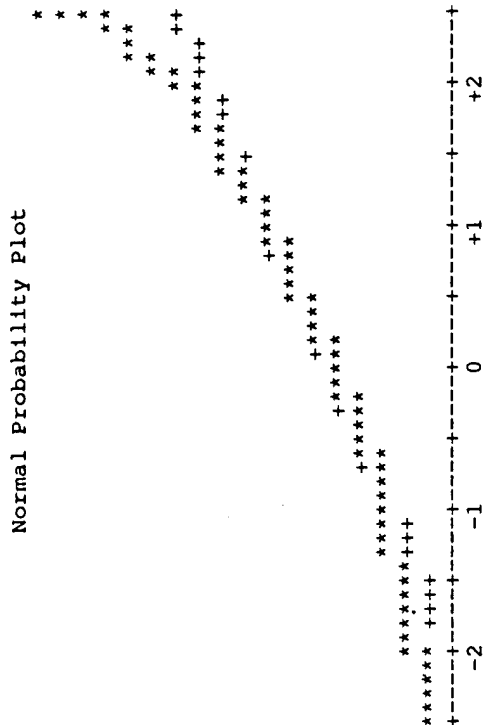
Histogram



Boxplot



Normal Probability Plot

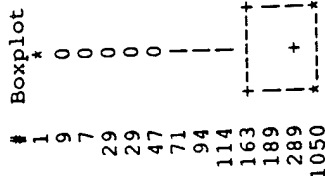
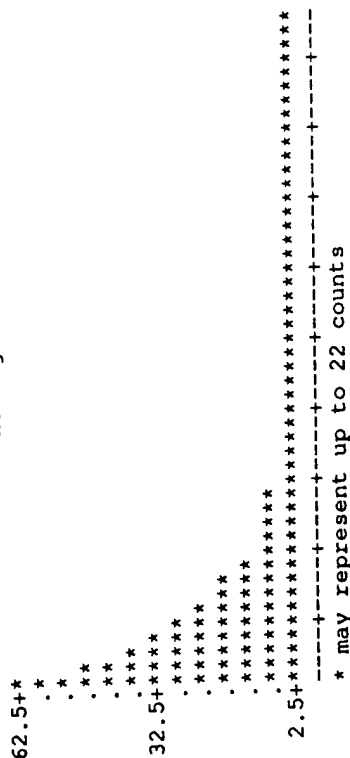


UNIVARIATE ANALYSIS OF ALL ENLISTED SCORES ON THE GHQ - BINARY SCORING

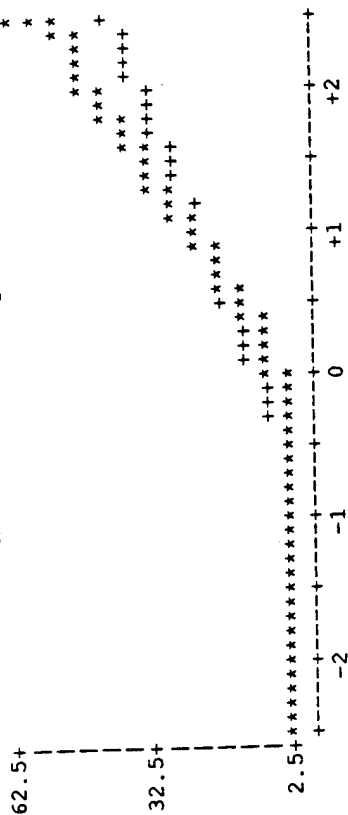
Moments					Quantiles (Def=5)					Extremes			
N	2092	Sum Wgts	2092	100% Max	60	99%	49	Lowest	Obs	Highest	Obs		
Mean	9.880524	Sum	20670.06	75% Q3	15.62712	95%	36	0(	2221)	57(	1463)		
Std Dev	12.2391	Variance	149.7955	50% Med	4.067797	90%	29	0(	2220)	57.9661(	892)		
Skewness	1.491236	Kurtosis	1.690691	25% Q1	1	10%	0	0(	2218)	58(	1703)		
USS	517453.5	CSS	313222.5	0% Min	0	5%	0	0(	2217)	59(	2018)		
CV	123.8709	Std Mean	0.267589	Range	60	1%	0	0(	2215)	60(	1740)		
T:Mean=0	36.92422	Pr>|T|	0.0001	Q3-Q1	14.62712								
Num ^= 0	1583	Num > 0	1583	Mode	0								
M(Sign)	791.5	Pr>=|M|	0.0001										
Sgn Rank	626868	Pr>=|S|	0.0001										
D:Normal	0.209749	Pr>D	<.01										

Missing Value
Count 131
% Count/Nobs 5.89

Histogram



Normal Probability Plot



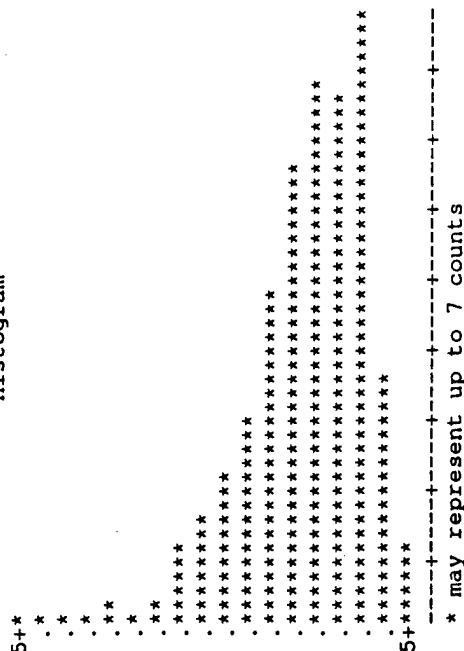
UNIVARIATE ANALYSIS OF ENLISTED MEN'S SCORES ON THE GHQ - LIKERT SCORING

L9

Moments				Quantiles(Def=5)				Extremes			
N	1703	Sum Wgts	1703	179	99%	134	Lowest	Obs	Highest	Obs	
Mean	48.08467	Sum	81888.19	61	95%	98	0(	1799)	163(	1590)	
Std Dev	26.51228	Variance	702.9008	44	90%	84	0(	1500)	164(	1792)	
Skewness	1.106011	Kurtosis	1.990586	28	10%	20	0(	1484)	172(	1190)	
USS	5133903	CSS	1196337	0	5%	15	0(	1304)	176(	1645)	
CV	55.13665	Std Mean	0.642451		1%	3	0(	1274)	179(	1424)	
T:Mean=0	74.84571	Pr>|T|	0.0001	179							
Num ^= 0	1695	Num > 0	1695	33							
M(Sign)	847.5	Pr>=|M|	0.0001	60							
Sgn Rank	718680	Pr>=|S|	0.0001								
W:Normal	0.928561	Pr<W	0.0001								

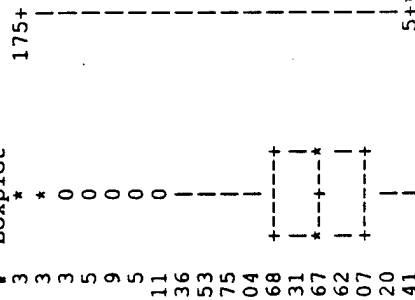
Missing Value
Count 117
% Count/Nobs 6.43

Histogram

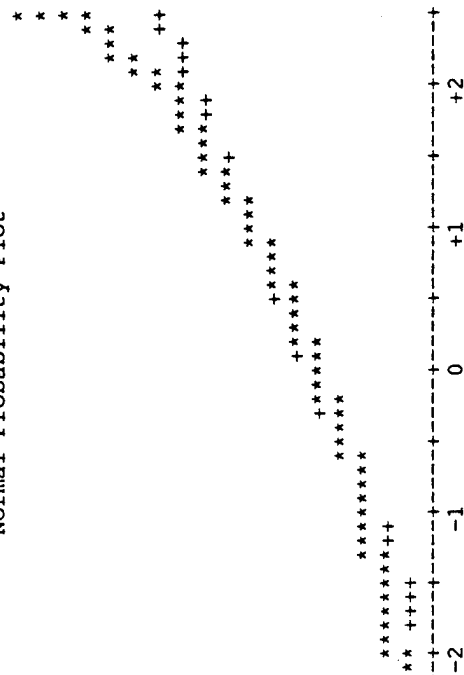


* may represent up to 7 counts

Boxplot



Normal Probability Plot

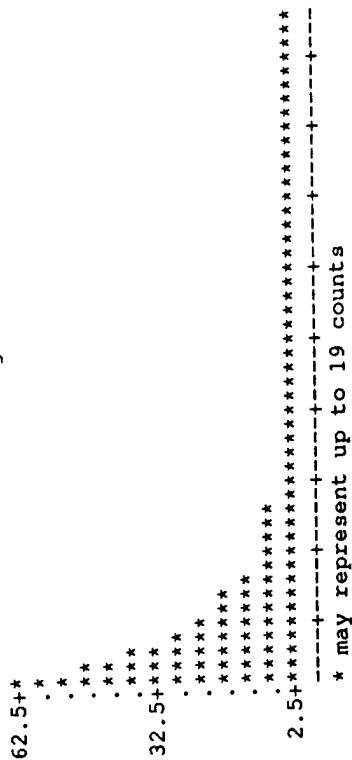


UNIVARIATE ANALYSIS OF ENLISTED MEN'S SCORES ON THE GHQ - BINARY SCORING

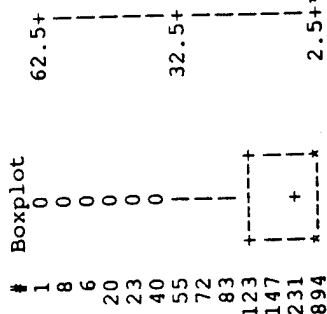
Moments				Quantiles (Def=5)				Extremes			
N	1703	Sum Wgts	1703	100% Max	60	99%	49	Lowest	Obs	Highest	Obs
Mean	9.450329	Sum	16093.91	75% Q3	15	95%	36		0(	57(	751)
Std Dev	12.16134	Variance	147.8981	50% Med	4	90%	28.47458		0(	57(	1190)
Skewness	1.579684	Kurtosis	1.988987	25% Q1	0	10%	0		0(	58(	1393)
USS	403815.3	CSS	251722.5	0% Min	0	5%	0		0(	59(	1645)
CV	128.6869	Std Mean	0.294696	Range	60	1%	0		0(	60(	1424)
T:Mean=0	32.06808	Pr>|T|	0.0001	Q3-Q1	15						
Num ^= 0	1263	Num > 0	1263	Mode	0						
M(Sign)	631.5	Pr>=|M|	0.0001								
Sgn Rank	399108	Pr>=|S|	0.0001								
W:Normal	0.76673	Pr<W	0.0001								

Missing Value
Count 117
% Count/Nobs 6.43

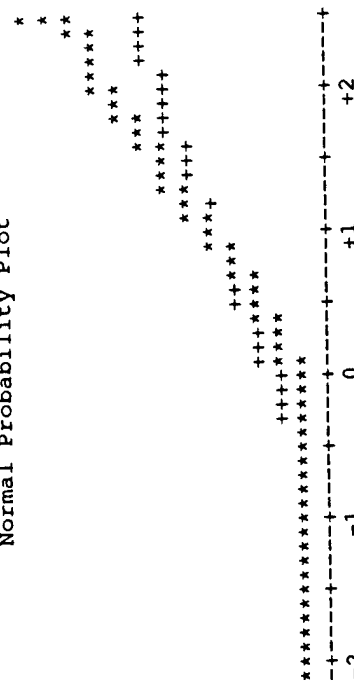
Histogram



Boxplot



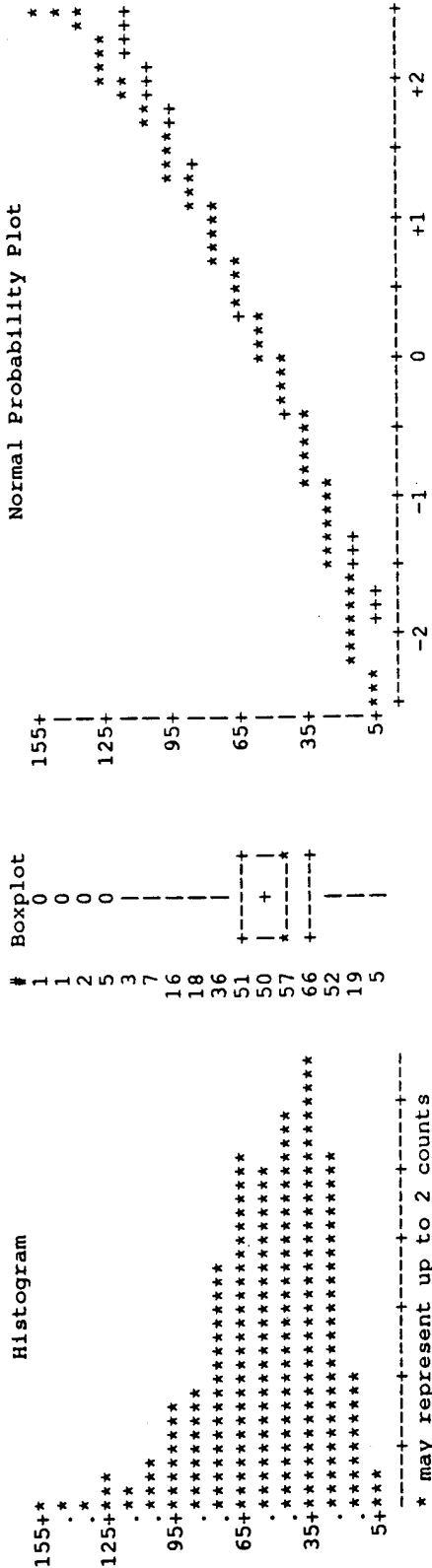
Normal Probability Plot



UNIVARIATE ANALYSIS OF ENLISTED WOMEN'S SCORES ON THE GHQ - LIKERT SCORING

Moments				Quantiles (Def=5)				Extremes		
N	389	Sum Wgts	389	100% Max	154.5763	99%	137.2881	Lowest	Obs	Highest
Mean	52.37726	Sum	20374.75	75% Q3	68	95%	99	0(	164)	126(
Std Dev	26.27693	Variance	690.4768	50% Med	49	90%	86	4(	104)	137.2881(
Skewness	0.844659	Kurtosis	0.832276	25% Q1	33	10%	23	5(	95)	139(
USS	1335079	CSS	267905	0% Min	0	5%	17	7(	141)	140(
CV	50.16858	Std Mean	1.332293	Range	154.5763	1%	7	9(	357)	154.5763(
T:Mean=0	39.31362	Pr>|T|	0.0001	Q3-Q1	35					
Num ^= 0	388	Num > 0	388	Mode	23					
M(Sign)	194	Pr>=|M|	0.0001							
Sgn Rank	37733	Pr>=|S|	0.0001							
W:Normal	0.946851	Pr<W	0.0001							

Missing Value
Count 14
% Count/Nobs 3.47

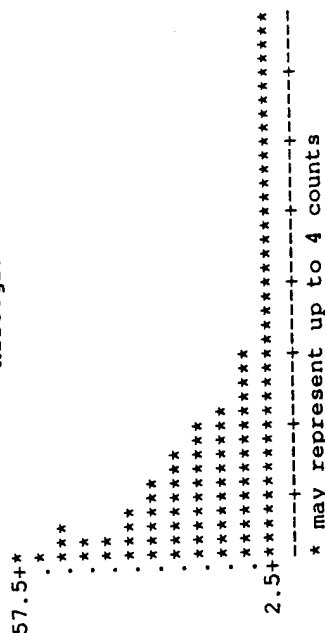


UNIVARIATE ANALYSIS OF ENLISTED WOMEN'S SCORES ON THE GHQ - BINARY SCORING

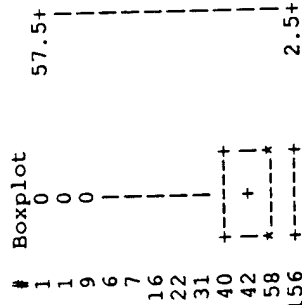
Moments				Quantiles (Def=5)				Extremes			
N	389	Sum Wgts	389	100% Max	57.9661	99%	48	Lowest	Obs	Highest	Obs
Mean	11.76387	Sum	4576.146	75% Q3	19	95%	37	0(	401)	48(	91)
Std Dev	12.41518	Variance	154.1366	50% Med	7.118644	90%	30	0(	400)	48(	146)
Skewness	1.17184	Kurtosis	0.789658	25% Q1	1	10%	0	0(	394)	49(	238)
USS	113638.2	CSS	59804.99	0% Min	0	5%	0	0(	391)	50(	38)
CV	105.5365	Std Mean	0.629474	Range	57.9661	1%	0	0(	388)	57.9661(	137)
T:Mean=0	18.6884	Pr>|T|	0.0001	Q3-Q1	18						
Num ^= 0	320	Num > 0	320	Mode	0						
M(Sign)	160	Pr>=|M|	0.0001								
Sgn Rank	25680	Pr>=|S|	0.0001								
W:Normal	0.842556	Pr<W	0.0001								

Missing Value
Count 14
% Count/Nobs 3.47

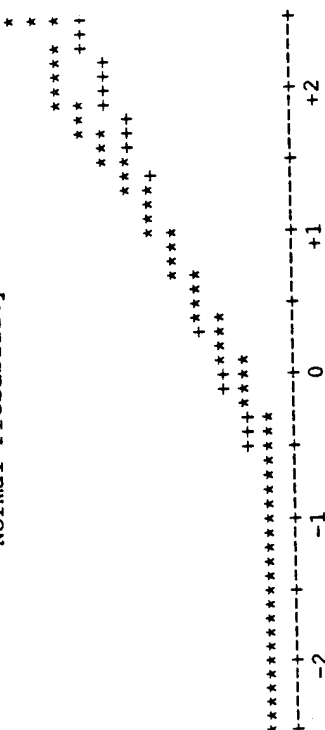
Histogram



Boxplot



Normal Probability Plot



EPILOGUE

DESPITE THE LARGE BODY OF LITERATURE ON RESPONSES TO STRESS AND TRAUMA there are substantial gaps in our current understanding of the stress effects in military women and how best to design and implement intervention programs to increase readiness and performance in military women in combat, deployment, contingency operations and traumatic events. More specifically, identifying the unique health problems in military women can enhance the services provided to military women. Practitioners can better anticipate health related problems ..

Although our studies have limitations, they illustrate the wealth of knowledge available about women across services. as discussed, they are most valuable, perhaps, in providing direction for future empirical investigation of the stress and health effects in military women. For example, the study of self-reported health problems and its relation to actual health status can provide valuable insights into the high symptom reporting often attributed to women.

It is not difficult to find behaviors among which selected groups of women and men show some average difference. Such differences make media headlines at times because they justify the status quo and help maintain the barriers to gender equality. Yet despite all the multiple conditions in our society that push girls and boys and then women and men into different spheres, there simply is no getting around the fact that the differences so painstakingly identified are often small indeed.

Epilogue

It is most important in gender studies to stay alert to 1) What is the meaningful outcome variable (clinical concern); 2) What is necessary and sufficient to claim a difference and 3) What are the effects of our research findings? How may they influence or perpetuate the status quo? (Tavris, 1993).

BIOPSYCHOSOCIAL RESEARCH ON GENDER: FOCUS FOR THE FUTURE

In future research a number of overarching perspectives should be maintained in order to further understand gender and high stress environment effects.

1. How are gender groups effected differently in high stress environments of combat and contingency operations?
2. How do women and men change over the life span - what is similar and what is different at various times in the life cycle?
3. Define the important gender-related differences which require intense study and decide on how to understand the relative magnitude of the differences between women and men. What is the meaningful outcome variable that is of clinical concern and what is necessary and sufficient to determine differences?
4. What are the important units of measurement of gender-related differences (see Eagly, 1995) for a review of the methodological issues related to research on gender-related differences. Sex differences are particularly well suited to being summarized by using a meta-analytic technique that synthesizes the research in the field. What is the relative magnitude of gender-related differences and why compare men and women rather than other social groups.
5. What, if any, function does maintaining the belief in gender differences serve for women in today's military?
6. What are the effects of our research findings and how does this influence or perpetuate the status quo of women in the military.

THE SYSTEMATIC STUDY of the effects of stress and trauma on women's health is timely for women in all branches of service. There is a close interplay between performance, health and psychosocial factors in responding to traumatic events. Little is presently known about how the women may be uniquely affected by traumatic events. Learning more about the gender-related responses in military women to traumatic events is important for the development of command policy, training, and medical care.